

college AND UNIVERSITY business

JANUARY 1960

Campus Planning

*Enrollment pressures of the Sixties call for
careful and intelligent planning 23*

These Are the Houses the Faculty Built

*Davidson College in North Carolina works out
a helpful aid to faculty recruitment 26*

Coed Residence Halls

*Indiana University finds plus values in locating
men's and women's halls close together 38*



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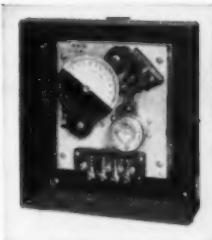
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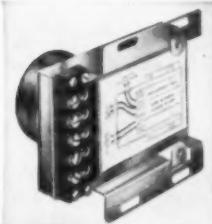
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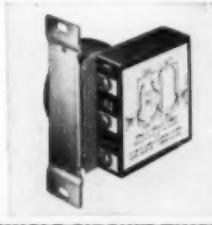
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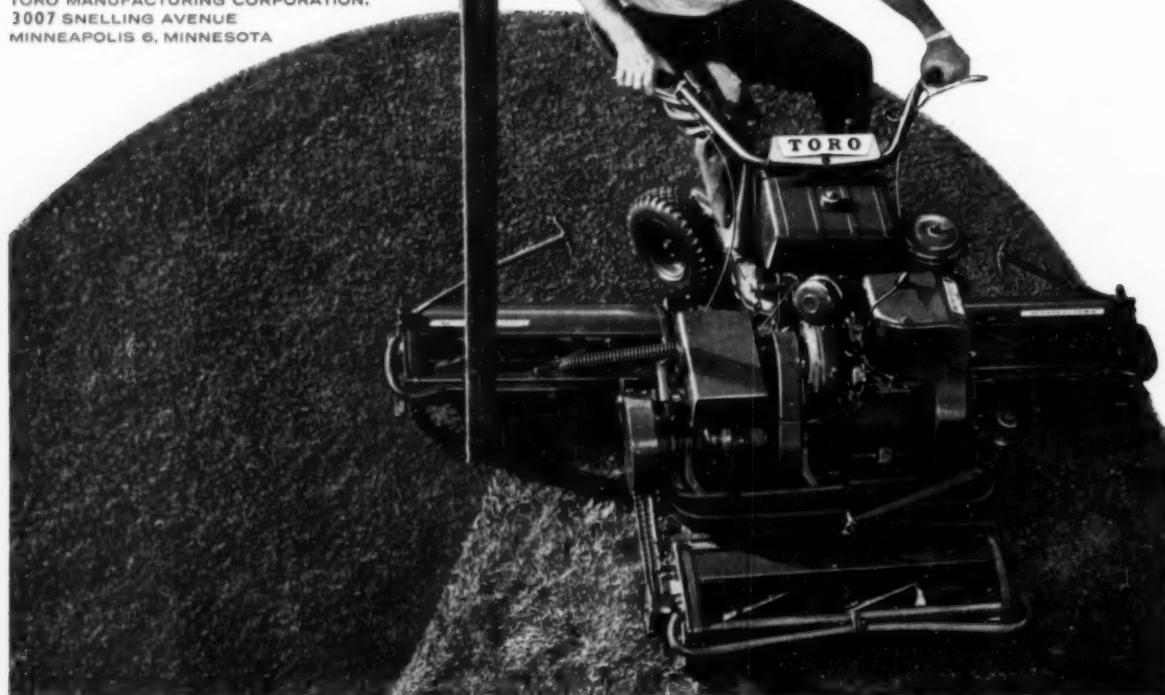
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AMONG THE AUTHORS: Dr. John H. Butler, dean of campus planning, San Francisco State College, has worked with the state-wide effort in California to study space and building requirements to meet enrollment pressures. He is in frequent demand as a consultant on campus planning. . . . Dr. D. Grier Martin, president of Davidson College, Davidson, N.C., is one of the few college business officers who has moved up to the president's chair. In this issue he describes the efforts of a small college to make faculty housing a plus factor in interesting and retaining faculty to meet competition of other institutions. His account is this month's cover story. . . . Alice Nelson, who for many years has been executive director of halls of residence at Indiana University, Bloomington, describes the efforts of the university to bring men's and women's dormitories in close proximity and, through the means of coeducational dining facilities, to provide an opportunity for students to acquire the social graces. . . . Mary Ann Warner, director of food service at Chicago's Art Institute, demonstrates in this issue that food service is also the field of art.

QUESTIONS AND ANSWERS

Gifts From Vendors

Question: At holiday seasons, members of the purchasing department staff are likely to be the recipients of the gifts from current or prospective vendors. What steps can be taken to correct this situation? — K.P., Pa.

ANSWER: The Code of Ethics of the National Association of Educational Buyers, which is very similar to the Code of Ethics of the National Association of Purchasing Agents, states that a purchasing agent has a responsibility "to decline personal gifts or gratuities which might in any way influence the purchase of materials." Every ethically sound purchasing agent will exercise this responsibility.

However, if it is felt desirable to avoid all gift giving by vendors to members of the purchasing department staff, a letter should be sent to all vendors, signed by the purchasing agent and the business manager, advising that it is the policy of the university to decline all such gifts and requesting the vendor's cooperation in observing the institution's policies. With such a decision the purchasing

department would proceed to follow the policy of refusing to accept any gifts.

However, as a purchasing agent will not accept any gifts that would influence his decision, is such a policy letter necessary? Furthermore, should the administration of an institution advise all of the staff members, including deans, faculty, clerical and service personnel, as to the "no gift" policy? Frequently, a dean of admissions may be a recipient of gifts; would it be desirable, if there were to be instituted a "no gift" policy, to have it apply to him as well? How should such a policy be evaluated in terms of the policy of the athletic department, as to the issuing of free tickets to athletic events?

As a purchasing agent, I believe that the question of Christmas gifts and gratuities is greatly overemphasized, both as to the amount that is thought to be given and the implications of the gifts. The more important question that should be raised is: "Has

(Continued on Page 6)

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(Continued From Page 4)

an institution built up a purchasing staff with sound, ethical and moral strength, well grounded in purchasing principles, and adequately compensated, consistent with the responsibilities of the position?"

As a typical buyer will spend hundreds of thousands of dollars a year for his institution, is he free from personal prejudice? Is he easily persuaded? Is his thinking clear? Does he treat vendors with consideration and respect but with firmness? Does he haggle over prices? Does he reveal

competitive price information without permission? Does he use, without permission, the original ideas and designs of one vendor to obtain a better price from another? Do the university officials encourage him to do such things? Such careful study of the fundamental soundness of the purchasing department staff in handling their purchasing responsibilities should be made. It is the basic core of the problem, rather than the question of Christmas giving, as buyers can lose much more money for their institutions in doing a poor job of purchasing through sloppy pur-

chasing practices than any deliberate violation of ethics.

As previously stated, gifts from prospective vendors would be refused by any responsible purchasing man because the intent of the gift is obvious. Gifts of small monetary value from a vendor, who has received courteous treatment with respect, has been interviewed promptly upon his arrival into the purchasing office, and has been dealt with fairly but firmly, are mere tokens of appreciation from a pleasant business relationship. For this to be considered as possible bribery of a high caliber of purchasing person is as ridiculous as to consider it bribery or influencing the judgment of the elementary school teacher who receives a gift from my son at Christmas and at the close of the year.

In conclusion, I do not believe that the giving of Christmas gifts should be encouraged, but rather that it should be discouraged as it becomes a nuisance. However, I believe the ethical concern about it far out-weighs the other problems of running an effective purchasing department in an institution. There is not an institution in the country that could not spend its money more economically, with more adequate, better trained staff. If any institution has on its staff a member, with buying responsibilities, whom they consider can be influenced by the purchase of a lunch, or by the giving of a Christmas gift of small monetary value, it should immediately fire this person without further consideration of the problem, as his moral standards are basically too low to be assigned the responsibility of spending hundreds of thousands of dollars. A person so easily influenced cannot possibly be doing an effective and economical job for his institution, and, as he must have such wide discretion in making decisions, he is in a position where he could receive financial considerations and privileges in so many devious ways that it would be dangerous for the institution to retain him any longer.—D. FRANCIS FINN, purchasing agent, *Purdue University*.

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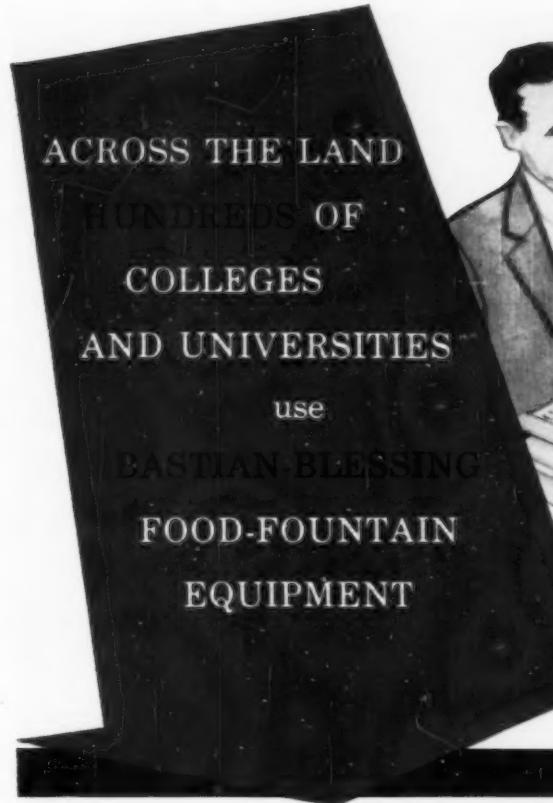
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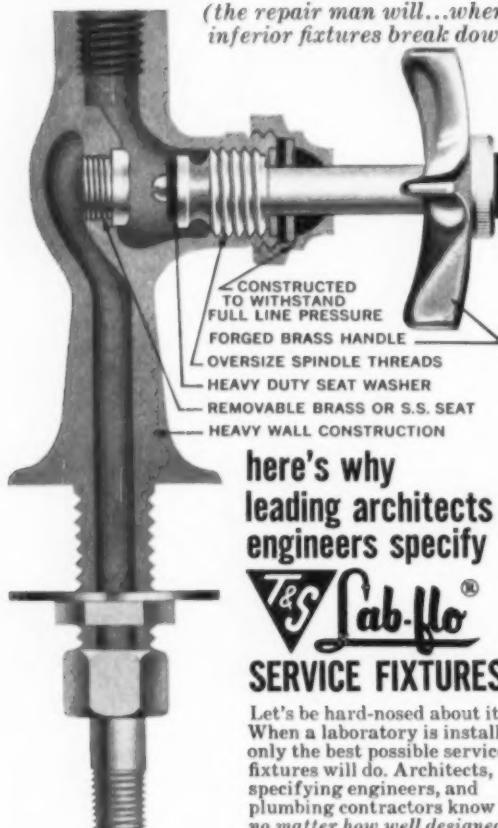
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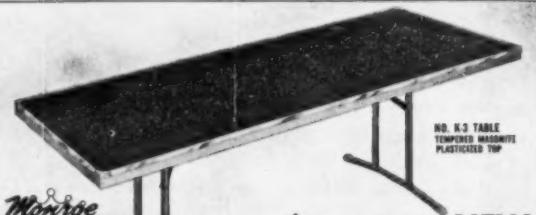
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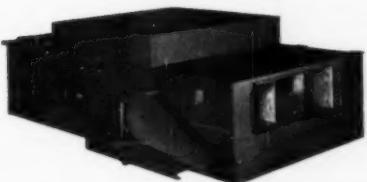
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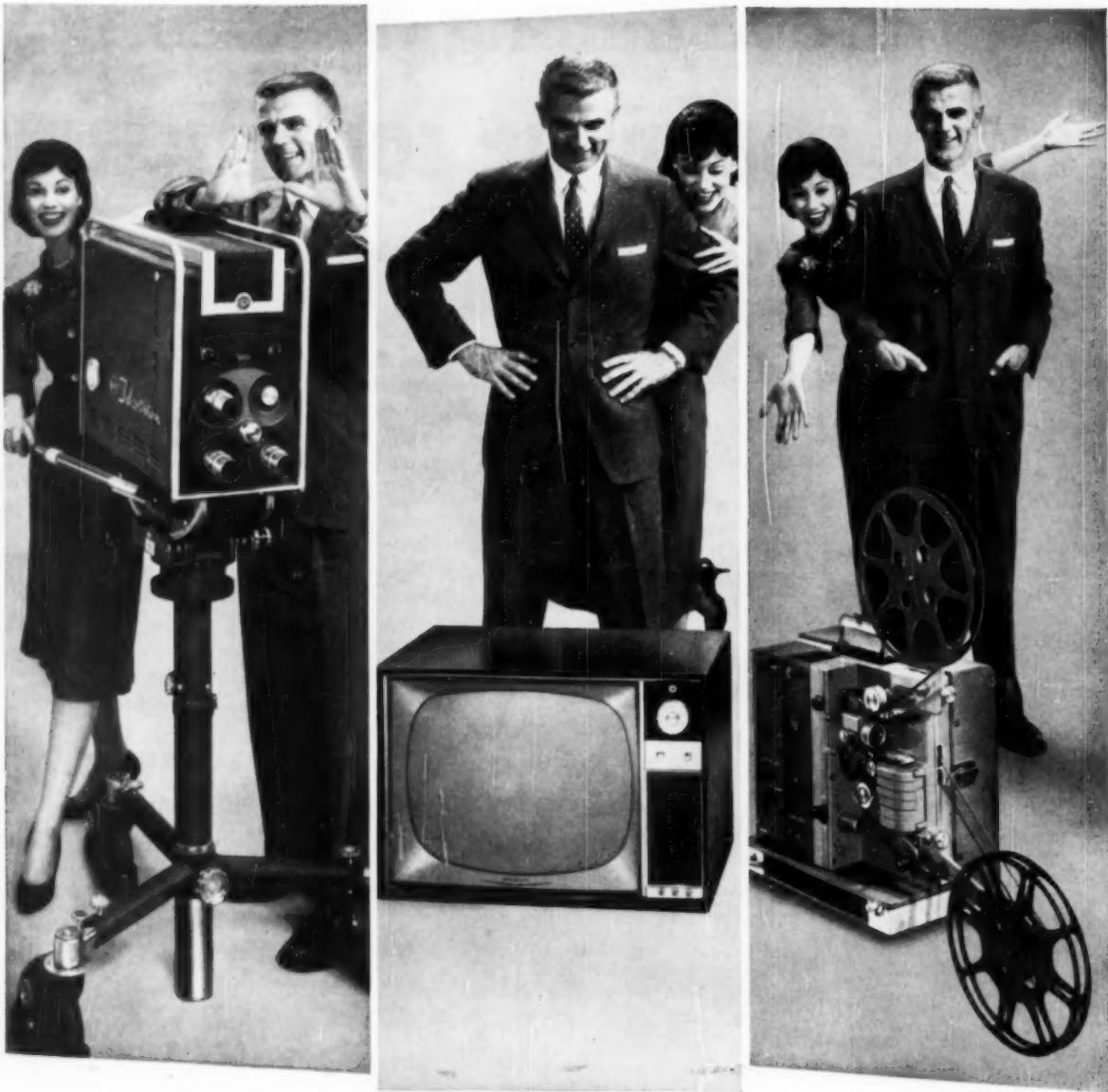


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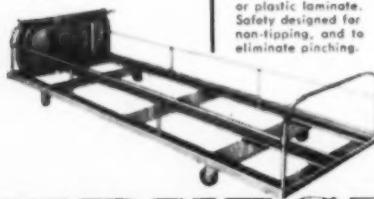
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Low Tuition vs. High Tuition

MILLER UPTON

President, Beloit College, Beloit, Wis.



TO ME it has long been an interesting human phenomenon how two persons in the same profession with equally sincere motivations can take diametrically opposed positions with regard to an issue in their common profession. Such seems to be the case with President John A. Hannah and me on the question of tuitions.

Let me say from the outset, however, that I do not favor the suggestion that the issue is really Low Tuition vs. High Tuition. I agree with President Hannah that the real question is: "How large a share of the cost of college education should a student pay?" and that this "is a philosophical issue." (Guest Editorial, November 1959)

In judging this question of how much of the cost of his education the student himself should bear, President Hannah apparently feels that it should be no more than the amount the state institutions are now charging and preferably less; I feel it should be substantially more and at least 50 per cent of the total. Such a suggestion to him is "heresy in virulent form"; I have long maintained, on the other hand, that unreasonably low tuition charges are socially, educationally and morally wrong.

They are socially wrong because such promiscuous subsidizing of our talented young people contributes to the development of a general social environment that inhibits the development of a mature sense of personal responsibility and thereby has a perverse effect upon our general educational efforts to develop responsible individuals for a free society.

They are educationally wrong because maintaining tuition charges at artificially low rates will inevitably result in the malallocation of our educational resources. I know of no educator, either public or private, who will not maintain that the diversity in our higher educational structure is one of its great strengths. How can such diversity be preserved if tuition charges to the state institutions are not kept in reasonable relation to the total cost per student? It is one thing to subsidize the full cost of education for those students in primary and secondary grades who are required by law to be in school; it is quite another thing to subsidize wholly or nearly so the higher education of an individual when such is and ought to be a matter of his own free choice.

They are morally wrong because such promiscuous subsidization of higher education is in opposition to our established ethic of taxation according to ability to pay. Where is there equity in having children of families who

are well qualified to pay the full cost of education have their education paid for them out of the general tax dollar, which is partially provided by low-income families who may or may not have children qualified to go on to college? The fact that the wealthy contribute to the general tax dollar at progressive income rates does not negate the fact that this indiscriminate subsidizing frustrates the intended progressivity of the tax structure.

President Hannah, in support of this inequitable arrangement, relies upon the quotation: "Better that 10 wealthy students receive public support than that one poor boy go without an education." If this were the only alternative, there may be some validity to such extravagance, but it is not. To my knowledge, all state institutions do or could have the authority to waive part or all of their tuition for students having demonstrable need. This could be so regardless of the size of the tuition. The thesis to which I subscribe is not that everyone be required to pay the higher tuition but that help be provided on an individual selective basis in keeping with demonstrable financial need and not handled in an indiscriminate, promiscuous fashion.

No one feels more strongly than I that educational opportunity must be kept open, that financial barriers must not estop gifted individuals from pursuing their studies to the fullest. Such a goal, however, requires selective assistance of the qualified individual, not promiscuous subsidizing of all — the qualified and unqualified, the needy and the not needy.

The idea that hordes of qualified students would be denied the opportunity to continue their education were tuitions at tax supported institutions raised to at least 50 per cent of the per student cost has not and cannot be supported factually. With the opportunities for summer work, scholarships, loans, and part-time employment, there is no reason anyone who is qualified to go to college and wishes to do so need be denied for financial reasons; nor need he jeopardize the effectiveness of his academic work. If he is not qualified to go to college, it would be a waste of valuable resources to encourage him to do so. If he is qualified but doesn't want to go to college except at little or no sacrifice to himself, it is doubtful that society will benefit from bribing him to go.

I agree with President Hannah that it is education we need and must have, but I submit that education is not achieved merely by the filling of spaces in classrooms.

LOOKING FORWARD

The Idea of a College

THERE is considerable debate in the public press regarding the proper function of higher education. Not the least in the intensity with which it is discussed is the matter of determining the future of liberal arts education.

In his new book, "The Idea of a College," Dr. Elton Trueblood, professor of philosophy at Earlham College, speaks out forcefully on problems facing higher education. As is emphasized on the book jacket, "The similarity between the title of this book and Cardinal Newman's classic, 'The Idea of a University,' is intentional. External conditions have changed, Dr. Trueblood points out, but the essential purposes of higher education have altered little in the intervening century. Since the college now provides the characteristic and central pattern of higher education, 'The Idea of a College' is concerned with defining afresh the ends of a college, as a prerequisite to answering the question of the means by which education should proceed."

Seldom does a busy college administrator take the time for philosophical reflection on the objectives and program of his institution. He becomes so concerned with the mechanics of handling "numbers" (whether it be dollars, students, or faculty) that he loses sight of the purpose of his institution and of his own proper functioning in the organization to make certain that these objectives are going to be met.

As a professor of philosophy, Dr. Trueblood renders a real service to higher education administrators in helping to stretch their minds and to broaden their horizons. "The Idea of a College," available from Harper & Brothers, ought to be on the office bookshelf of hundreds of college administrators.

A New Tax Gimmick

THE December 7th issue of the *Bulletin of the American Association of Fund-Raising Counsel* reports on a recent story in *Business Week*:

"There's a new twist on the idea of donating securities — it is called 'giving capital gains.' What you do is sell a block of securities to your college or charity, charging only your low, original cost. You wind up with cash in pocket, plus a tax deduction. Say you own a stock that cost you \$20 years ago. Today, it lists at \$50. You sell the shares directly to the institution for \$20, and so get back your cost. You then deduct, for tax purposes, \$30 a share."

It sounds like a pretty fancy arrangement, but it might merit some investigation to see if the idea proves out as far as tax authorities are concerned.

Recruiting Practices

IN RECENT years, the fact that college and university graduates have been much in employment demand has resulted in recruiting practices that cannot be condoned.

To meet this problem the American Society for Engineering Education has developed a statement on "Recruiting Practices and Procedures, 1959." The general principles of recruiting, as reflected in the statement, merit further consideration. To quote:

"It is in the best interests of students, colleges and employes alike that the selection of careers be made in an objective atmosphere with complete understanding of the facts.

"Therefore, the recruiting of college students for employment by business, industry, government and education should be carried out by the employers, students and college authorities to serve best the following objectives.

"1. To promote a wise and responsible choice of a career by the student for his own greatest satisfaction, minimal wasteful turnover, and most fruitful long-term investment of his talents for himself, for his employer, and for society.

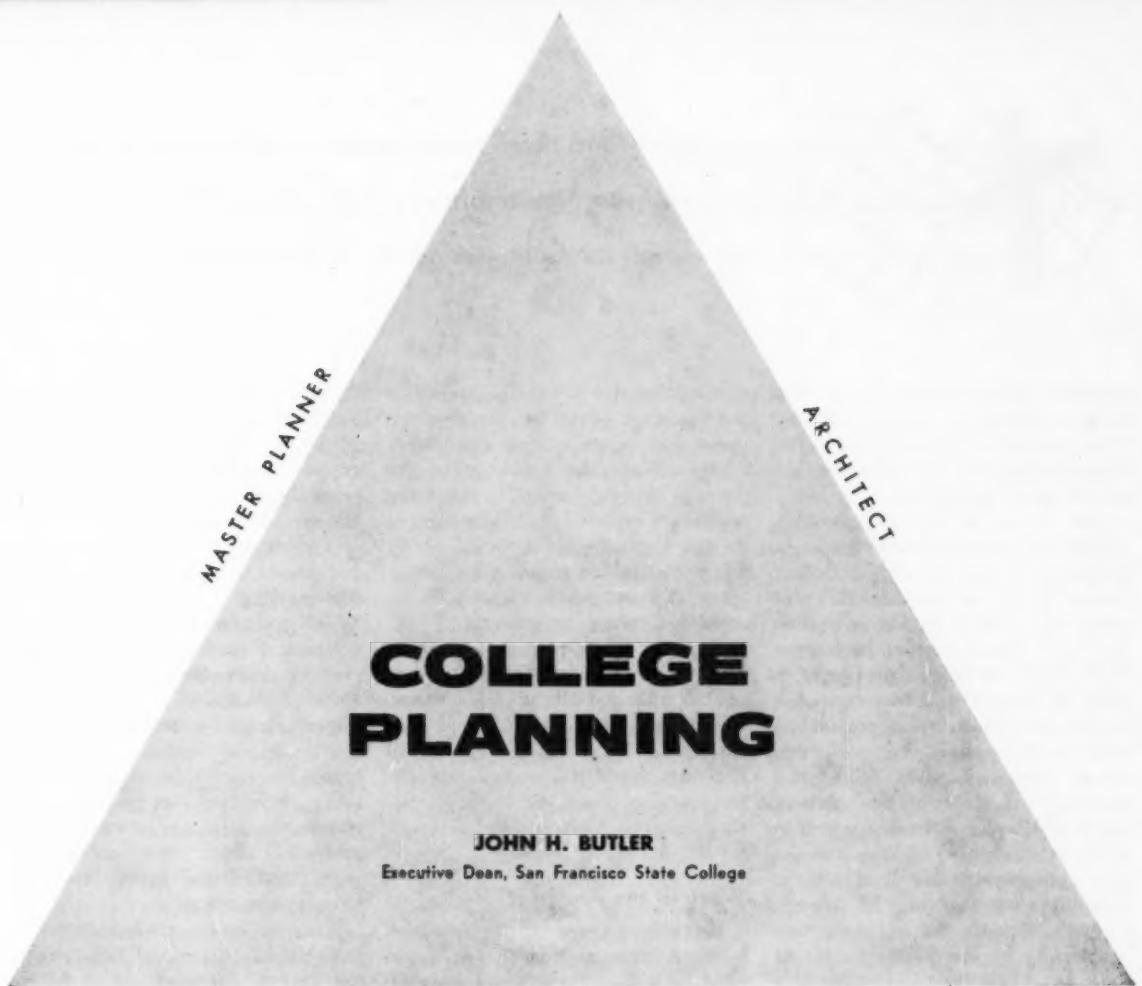
"2. To strengthen in him [the student] a high standard of integrity and a concept of similar standards in the employing organizations of the country.

"3. To develop in the student an attitude of personal responsibility for his own career — and advancement in it, based on performance.

"4. To minimize interference with the educational processes of the college and to encourage competition of the individual plan for further education."

The average college or university graduate, particularly in the sciences, has been able to choose the employment area of scientific specialization on which he wishes to concentrate. The result has often been evident in the selection of a college graduate who drew down a salary far in excess of his competence. The rude awakening develops later.

It is hoped that a study of the folder, "Recruiting Practices and Procedures, 1959," may suggest ways in which the abuses can be eliminated or corrected. The regulations outlined should help in formalizing the recruiting procedures and reducing the possibility of improper pressure.



JOHN H. BUTLER

Executive Dean, San Francisco State College

EDUCATIONAL PLANNER

IF THIS article were written in pictographs, its title might well be a triangle, the three sides of which would represent, respectively, the master planner, the architect, and the educational planner. The area bounded by the three sides of the triangle would represent the faculty, the administration staff, and all others in the college or university who are concerned with building facilities.

Work of Master Planner

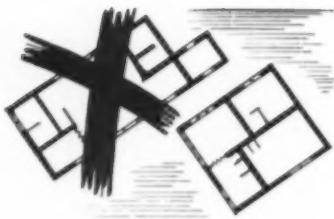
Long-range campus planning is as necessary to colleges and universities as it is to cities, parks, industrial areas, and any other ventures that depend upon the future for their development. Only when we build every facility at once, and build for all time, is long-range planning unnecessary.

For some of our campuses of higher learning, long-range planning is already very late. They are choked with misfit buildings on misfit locations. Their over-all collection of structures constitutes a functional mess and an architectural confusion, inefficient for the educational activities they must carry, devoid of grace or beauty, but too costly to replace.

It is impossible—and it would be unjust—to attempt to allocate the blame for the cluttered up accumulation of buildings that house many of our older colleges and universities. Most of them were born as small institutions. Neither the early president nor the architects dreamed that the academy would become a college, that the college would become a university, that the university would increase its enrollment manyfold.

Their residence halls, once reasonably well placed, are now surrounded by classroom buildings. New structures were set down wherever there was room to squeeze them in, too often with no consideration for functional placement. When new land was acquired, new buildings overflowed upon it, guided only by present expediency. At every stage of growth, master planning and rebuilding would have proved invaluable. But, at the time, presidents were reluctant to pay for sweeping redesign and rebuilding, if they had any conviction that replanning was necessary.

Today, however, we have skilled master planners. Why, then, are their potential contributions so often ignored? Why do so many architects assume that they are as expert in laying out a campus as they are in de-



Each of the three planners is essential, distinctive.

But the architect will do most of the work,

draw most of the fees, and reap most of the glory.

signing a building? Why are so many college boards and administrators blind to their urgent need for skilled long-range campus planning by skilled master planners?

New campuses have appeared like magic on onetime pastures and on empty tracts on city edges. But no matter how generous their sites, too many new colleges and universities continue to build only for the present. They huddle their structures together with no thought of future expansion by cohesive units. They provide no open central areas, no peripheral courts. Some of them follow the wasteful site plan of the chicken ranch. Often the precious space thus saved is squandered in long setbacks from peripheral roads and streets, providing sweeping vistas for passers-by at the expense of functional space and beauty for the on-campus life of students and faculty.

On the other extreme is the cattle pasture approach. With the assumption that there is no beauty without sweeping space, buildings are scattered thinly over the landscape, separated by extensive lawns and generous plantings. The poor student who has but 10 minutes between his first class in North Hall and his second in South Main has to be able to do the hundred in 6 seconds flat. Or use a motorcycle.

The college or university that retains a skilled master planner avoids these errors that waste funds, impair educational functions, and destroy campus beauty. The skilled master planner is solidly grounded in landscape planning as well as in land planning. He knows the problems of the architect who will follow him.

He knows how to set the initial complement of buildings so that they meet our demands for educational function. His drawings show the addition of future structures without loss of function—by instructional units. He provides for parking, but screens it

beautifully. He plans the walkways on estimates of traffic, the roads to meet policies on campus circulation.

He orients the buildings to the terrain, the soil structure, the view, and other essential factors, as well as to the institution's functional needs. He knows where to place the power plant, service roads, playing fields, residence halls, and other units that are not in the domain of college instruction and administration. He cuts off the hills and fills up the hollows, selects the general planting and arranges it. When he has finished, his drawings chart the campus growth for years to come. We have a long-range plan to guide us. We are ready for the architects.

Work of the Architect

Before he starts designing a college building, the architect must have what he calls a "program," or what the educational planner calls "educational specifications." In nine cases out of 10, the architect is given nothing but the most vague educational specifications before he is turned over to the mercy of the college staff who is to occupy the building. Usually, he deals with several committees, a dean or two, a chairman, and dozens of professors. He struggles along with conference after endless conference. He discovers the seamy side of the cloistered college life, the petty jealousies, the practical ineptitude of deans and chairmen, the lack of financial realism, and strange inabilitys of the academic mind to grasp eighth grade arithmetic and simple space concepts.

Little by little the harried architect builds up his own educational specifications. He finds himself acting as a referee between individuals and groups, each of whom wants gold plated doorknobs at the cost of no doorknobs for the others. In many situations he relies upon the old technic of giving everybody everything, until

he makes his first cost estimates. Then he confronts his committees, deans, chairmen and faculty with the facts of life, the appalling gap between what they collectively want and what the available funds will finance.

The squeeze is on. Classrooms are reduced in size. Faculty offices shrink. Tablet armchairs are substituted for tables and chairs. Laboratories get crowded. Even the toilet facilities and janitor's closets begin to get pinched. Entire functions often must be eliminated. Thrown to the budget wolves are the faculty conference room, the lounge area, the beautiful entrance lobby. Worse yet, out go preparation rooms, the museum, storage rooms, and many of the other special auxiliary facilities the faculty members have their hearts set on.

After the architect has been forced to slaughter educational functions on the altar of a limited budget, he begins to cut where it hurts *him*. He must narrow the corridors, eliminate interior plaster, give up exterior stucco or brick, and renounce the beautiful entrances. He drops ceilings to save cubage. Out goes graciousness from the stairways, dignity from the lobbies.

Every good architect is an artist. It is true that he designs his buildings for clients, but, like a portrait painter commissioned to paint Aunt Emma, he has a fierce pride in his work. When he screams about sacrificing beauty for function in a college building, we educational planners have little sympathy for him. On the other hand, we bleed with him when he must sacrifice beauty and function because of inadequate educational specifications and an inadequate budget. We are all the sorrier for him because *he*, as well as his client institution, is often at fault.

Some of the architect's troubles are due to his lack of knowledge in the field of college and university functions, some to what is perilously close

But the more he is aided by the other two planners, the more he will be freed to devote his energies, skills and artistry to the work he was trained for.

And the better will be the single structure or the brave new campus.

to arrogance—the assumption that he can work with anybody, and draw educational specifications as well as working drawings. Like many other professionals, he often neglects to discover the existence of experts in other fields, and to suggest that his client retain their services.

More and more the architect who designs college and university buildings must rely upon the services of the expert master planner for campus design. By the same token, the architect must come to demand and rely upon the services of the trained educational planner, who is just as essential to sound college and university design as is the master planner.

Work of Educational Planner

The educational planner must be professionally trained and professionally experienced in the field of higher education. He should know how colleges and universities are organized, administered and taught. He should have had actual experience in college organization, college administration, and college teaching.

He should know much about what goes on in every college building, classroom, auxiliary room, and office. He should know the academic mind and how to deal with it, the administrative relationships, and the facilities needed to serve them efficiently. He should be experienced in dealing with faculty committees, deans of this and that, the business manager, the maintenance superintendent. Basic to all this, he should know college students and their educational needs.

He must know how to help the institution measure building needs, how to build educational specifications to fit needs, how to interrelate educational functions and provide for this interrelation in his educational specifications, how to check them in the architect's floor plans.

If the educational planner does his work properly, he will have completed

skeleton educational specifications for all contemplated future buildings before the master planner is retained. These skeleton specifications will indicate two things necessary for the master planner: (1) the functional placement of all facilities, and (2) the approximate square footage of all facilities. With these matters clear, the educational planner is ready to work with the institution and the master planner so that the latter can design a sound, long-range campus master plan.

Two more steps should be taken before the institution is ready to call in the architect. First, the skeleton specifications must be expanded into detailed specifications. This work is done by the institution under the direction of the educational planner. Second, the institution must obtain its capital outlay funds. With its long-range master plan and its detailed specifications for each contemplated new building, the institution can now lay an orderly program before regents and legislature, if it is a state institution, before trustees and prospective donors, if it is privately controlled. Those who must vote or contribute the funds will know exactly what facilities they are asked to finance, and just about how much the facilities will cost.

Once the funds are procured, the institution is ready to retain its architect. Once the architect is procured, he is ready to start the kind of work his training and experience have fitted him to perform. He knows where his building or buildings are to fit into the master plan. He knows how much money is available for each structure. The educational specifications provided are so complete that he can develop his first preliminary drawings before he has had a single conference with the educational planner and faculty.

As the preliminary sketches develop, the educational specifications

will undergo modifications. The educational planner who worked them out is not an architect, hence cannot foresee many an architectural difficulty. The faculty and staff of the institution will have some second thoughts about what they need. But the changes from good educational specifications will be amazingly few, either in the preliminary or final stage of architectural planning.

The architect will escape the endless preliminary conferences, the quarrels, the frustrations of trying to build the "program" himself. He will no longer be forced to take notes on academic demands so fantastic and costly that they have no possible chance of being included in the structure. There will be few or none of the repeated and painful "squeeze" conferences, when the academic cloth must be cut to meet the financial pattern.

As the preliminary sketches develop into final working drawings, the detailed educational specifications will continue to earn the architect's blessings. As modifications are made, each will be noted upon both the architect's and the institution's copy, and signed. There will be no reliance upon verbal agreements. Everything that goes into the architect's working drawings will be supported by the written word of the educational specifications. Conferences will be fewer and shorter, for they will always have direction and explicit purpose.

When the blueprints and architectural specifications are completed, the detailed educational specifications are ready for final checking. They protect the architect as well as the client. Even when the structure is completed, these detailed educational specifications will continue to have great value. They will prevent misunderstandings between architect and client, bickering, even lawsuits. They will educate the architect for his next college job. They will train the institution for its next capital outlay venture.

These Are the Houses the Faculty Built ▷▷▷

**Davidson College finds staffing problems
much easier since it opened a subdivision**

D. GRIER MARTIN
President, Davidson College, Davidson, N.C.

FOUR and one-half years after the adoption of a new housing policy at Davidson College, Davidson, N.C., 35 members of the faculty and staff have changed their status from renters to homeowners, and a serious faculty housing problem has been eliminated.

So successful has been this program that today more than 80 per cent of the faculty members who have been at Davidson more than three years own their homes or possess lots and building plans.

Before the study that led to the adoption of the new housing policy there were many unhappy people at the college, not only the professors but also those in the business office who tried to provide adequate housing for all who came to the little town of Davidson to work for the college.

There were not enough houses and many of them were antiquated. All were rented at the same low price, and this caused serious competition among members of the faculty for the few "better houses." There was the same competition in regard to modernization, redecoration and repairs.

Moreover, there were no good houses or lots for sale at reasonable prices in the town, and suitable low-cost financing was unavailable. The rent charged for college owned homes was too low to encourage members of the staff to build their own homes or to justify private interests to construct houses for rent. The 39 members of the faculty and administration who owned their own homes had good reason to feel that the college should not use general funds to subsidize housing for other faculty members.

Acquiring new faculty and staff was being seriously hindered by the in-

adequate housing. This problem was growing more vexing because the size of the faculty was increasing and because many noncollege people were finding Davidson a good place to retire to and to live in and work in near-by Charlotte.

Provisions of Program

The program adopted by the trustees provided:

1. That college owned property near the campus, unsuitable because of its location for college buildings, be divided into a 20 lot subdivision and offered to members of the faculty and staff at below-market prices and on favorable terms with an interest rate of 4½ per cent.

2. That staff members desiring to build homes in the subdivision or elsewhere be given every possible encouragement and assistance by the college.

3. That loans for the construction be made available from the college endowment fund to permanent members of the staff, with the down payment as low as 10 per cent, interest at 4% per cent, and the term to be a maximum of 30 years or the number of years until the applicant is 65, whichever is lesser. Each borrower would be required to sign a permit for the college to deduct from his monthly check the payment necessary to meet the charges for amortization, interest, taxes, fire insurance, and life insurance on the unpaid balance of the note.

4. That faculty and staff members also be given the opportunity to purchase college owned houses except those immediately adjacent to the campus. The values of these houses would be determined by the finance committee on the basis of an inde-

pendent appraisal. The terms of payment and the interest rate would be the same as for new houses except the down payment would be larger and the term of the loan would be determined by the age and condition of the house.

5. That the college retain the right of refusal on the future sale of new or old houses by any purchaser, original or succeeding.

6. That a new schedule of rents be established on the houses owned by the college, varying in accordance with the values determined by the appraisal board. Any increase in rent would be put into effect in a graduated manner so that no occupant would have a rent increase of more than \$5 per month in any one year.

Arrangements for the development of the subdivision were made easier by a cooperative town council headed by Mayor Frank L. Jackson, former treasurer of Davidson College. Engineering, clearing and grading in the subdivision were completed by the college. Water and sewers were installed by the town under a cooperative plan under which the college paid for the entire project with the agreement that the town would repay a substantial portion of the cost over a period of years.

The town also paved the streets after owners agreed to pay for curbing.

Eighteen of the 20 lots in the subdivision have been sold, and 16 houses have been completed. Seven new houses have been built under this program in other sections of the town, and nine existing houses have been purchased and remodeled. A total of \$272,976.50 has been loaned on property valued at twice that amount.



New houses built by Davidson faculty through favorable loans from college endowment fund.

The houses in the subdivision were built by the owners, who hired a local builder to supervise the construction. He pleased his customers so well that they united to give him a lounge chair, a framed expression of their appreciation, and a scrapbook showing pictures of all the houses.

Some beneficial results of this program have been:

1. Improved faculty and staff morale, resulting from approval of college policy and pride and pleasure of home ownership.
2. Better appeal to prospective faculty and staff members.
3. Increased income from rental property owned by the college and from investment of funds received from sale of college owned houses.
4. Easier handling of the housing situation with more rental housing available for new members of the faculty and a way for members of the faculty and staff to provide their own housing.
5. Better relations with the town council through cooperative arrangements for development of a quality housing project in the community. ■



President Martin looks over the area as the grading for the streets was begun.

DATA PROCESSING

How to organize the department before and after the first machine arrives

R. W. DAYHUFF

Director of Data Processing, Brigham Young University, Provo, Utah



The post of director of data processing will come only at the final stage of department development.

A NUMBER of titles are used for a punched card machine records department: machine records, business machine department, machine accounting, and so forth. In this article we shall use "data processing" as the most descriptive and current title. In considering the basic organization of a data processing department, the functions to be considered are defined as:

1. *Administration.* The over-all guidance of effort in the department; the policy level of the organization; the level from which the authority for execution is delegated.

2. *Planning.* Semidetailed writing of the methods to be used in performing data processing work; working out usable procedures for the machines in cooperation with the other offices and departments for which the work is being done.

3. *Coordination.* Scheduling work into and out of the department; setting up and maintaining working relationships with operating personnel in the offices from which raw data are received.

4. *Training.* Providing a backlog of trained operators to be certain of continued operating knowledge of all applications — important in the event of personnel changes.

5. *Morale.* Maintaining a cheerful atmosphere in the department, while supporting the administration and its policies; providing a feeling of security and importance to the employees.

6. *Performance.* The actual machine operation; setting up applications, maintaining schedules for delivery of reports, and so forth.

Each function and its place in the organization will be discussed separately.

Before we look at the organization of a data processing department, it will be helpful to discuss personnel, which is the major problem of organization.

When a decision to go to punched card machine methods is made, the first step is to obtain a qualified person to install the machines and to be responsible for the operation. The two main sources for such a person are: (1) a talented employe from the department, who will be most concerned with the use of the machines, and who will be technically trained after the machines are ordered; (2) an experienced person recommended by the machine manufacturer from outside the organization.

Training a Present Employee

The major advantage of the first source is the person's being known by the administrative personnel, and the possibility that he has a working knowledge of the jobs to be done on the machines.

However, there are disadvantages. Some of them follow.

1. The person picked for the job is frequently not talented. Availability is the criterion used in many cases. Aptitude tests available from the machine manufacturer can point out the candidate's machine accounting potential. These have proved to be quite accurate, and should be used. If a talented person is not found in the departments most concerned, it is best to search for an interested, qualified man

in other fields in the organization. If unsuccessful in this course, then it is appropriate to look for an outside man.

2. The training will take the new supervisor away from his present work for long periods. A replacement will have to take over his old job as soon as he starts his machine training.

3. The training period will be expensive in terms of time and perhaps travel expense. It is essential to make out a realistic timetable of schools and required travel with the manufacturer's representative. The new supervisor is going to bear a heavy burden of responsibility in his job, so he should be as well trained as is necessary.

4. The installation, if handled well, will grow. A common mistake is to select a man who has promise as an operator but whose administrative ability has not been considered. Increasing numbers of employees in the department will present personnel problems as the benefits of machines are realized and more applications are added. The supervisor must have the ability to deal with people. The supervisor of any new machine installation will learn how to handle people, if he is capable, as he gains additional employees. Observation of the supervisor in the first stages of development of the installation will give ample evidence of the executive tools at his disposal.

What To Look For

A few of the attributes to be looked for are enthusiasm (ability to stimulate a desire for action in his subordinates); cheerfulness (a never failing quality for stimulating others); unselfishness (loyalty is won by unselfishness); calmness (without it subordinates will lose confidence in him); consistency (erratic behavior is destructive of morale).

Even with these drawbacks, the advantage of a previously established personal relationship between the man and the university staff is extremely important. A well known and liked person, even if new to the machine accounting profession, can engender cooperation where a stranger may not. Only one requirement is more important than cooperation, and that is machine operating skill. The element of cooperation cannot be overemphasized in its importance to a new in-

stallation or new application. The machines are only as useful as the staff allows them to be. Poor relationships bring poor results.

The greatest advantage of the second source of supervisors is that the man will be experienced as well as trained on the machines. The saving in time between his appointment and the beginning of detailed planning will be significant. Equally important will be the savings realized in training expense. This can be a sizable outlay of cash in the case of training a present employee.

Another advantage is that the man will probably bring with him an aura of authority that the opponents to machine methods on the present staff (there will be some!) will find hard to refute. He usually will be termed an expert, an oracle of his profession. His acceptance by his associates will be made easier by this prefabricated reputation so long as he does not misuse it by trying to assign an additional air of mystery to his work.

The major disadvantages to this course of action are:

1. The man is a stranger. He must integrate himself into the administrative family as well as plan the jobs to be performed by the machines. There may well be a period of time when the man goes about exploring avenues of cooperation that will be pure wheel spinning. The complete knowledge he must gain of each application requires as well knowledge of the people who will work with him in accomplishing his objectives.

2. Personal knowledge of his executive potential is not available within the staff of the organization. While this man is the logical candidate for promotion, and must possess or develop executive talents, reliance must be placed on letters of recommendation, interviews and observation. There should not be any difficulty in getting an adequate estimation of his machine ability, since the machine manufacturer will normally know a great deal about his past operations, experience and reputation.

An important qualification of this objection is that if an outside man is hired, and, in his first contacts, is making friends, is obtaining cooperation, and is accepted in his role as an expert but is not abusing it — in short, is displaying a framework of executive timber — his ultimate promotional

possibilities may be considered basically good.

If this type of man is actually obtained, it will be the course of wisdom to recognize his ability with the normal awards of pay and position, and with what is just as important — solid administration backing of his ideas. The last is so important that it could be considered as one of the conditions of his employment. A good man will not stay long in a place where his attempts at progress are blocked or are not supported.

To summarize these considerations, the selection of a present employe for the job as supervisor generally will cause the planning period to be quite lengthy. It is an error to allow the machine manufacturer to do all the technical work in order that this type of delay be reduced. This help only puts off the inevitable time when local people must figure out the problems for themselves.

A present employe is a risk in this work in that he has no history of success in machine operation. He may be quite enthusiastic about it at first blush, and then become disillusioned when the hard work begins.

Hiring an Outsider

Hiring an experienced supervisor from the outside, one recommended by the machine manufacturer, would probably solve these two problems. The difficulty with an outside person is that he must join the crew as a stranger and carve his niche in the administrative family. However, if he is an able person, he will accomplish this along with his machine work. Both courses of action have been successful. The outside man is generally an aggressive subordinate in his former job who is ambitious for more responsibility. Properly recommended, the experienced data processing man will generally produce better results much faster than a man who is new to the profession.

In applying machine methods to various accounting and data processing areas, close consultation with the directing authority of each area will be necessary. The relationship of such authorities to the data processing department is advisory in nature. When the department is first formed, a simple organization will be all that is required. In defining the channels of authority, it is extremely important

that the administrative officer ultimately responsible for the department will be one who has the authority to cross departmental boundaries. If this is established at the outset, it will make the job of the supervisor much more livable than otherwise, as he expands the work done by the machines into multiple areas in the organization.

For this reason the top administrative position below the president shown on the accompanying organization charts is the equivalent of the vice president of fiscal and finance matters. Titles for the top business officer differ radically among institutions, but we shall call him here the V.P. — finance. On this level, there is a better chance to relate the value of the department to the entire organization than if the responsibility is left to a lower level (such as the controller). There will be less bias toward one field to the detriment of progress in other areas if high level control is maintained.

Many Problems Avoided

If the responsibility is properly placed before the first machine arrives, problems of organization and questions of authority that could be serious later in the history of the department largely will be avoided.

Figure 1 shows how the functions are delegated during the first year or two of operation of the department.

In the first stages, careful staff coordination between the manufacturer's representative, V.P., treasurer and controller will be invaluable for successful planning. Mere details overlooked here will soon return as problems clamoring for immediate solution. It is amazing how one digit of a payroll number, not considered in the planning stage, can grow from the molehill it is to the mountain it becomes after the forms are delivered, cards punched, and so forth.

In this stage of organization, the planning function is being handled largely by the equipment salesman. This is one change that may be made on the chart. If an experienced supervisor is hired from outside, all the functions may be kept within the administrative staff. An experienced man would do planning in addition to coordination and performance.

Figure 2 shows how functions are reassigned (delegated) after successful operation for some time of such

basic jobs as accounts receivable and payroll. The period of time between the two figures is indeterminate. The actual organization and assignment of functions will be quite fluid, and subject to the personalities involved. Figure 2 is a snapshot of the organization at some moment in time, showing how development should be planned for obtaining the most efficient, stable results of the department.

The supervisor is still operating machines at this point. However, he has assumed the planning and, in part, the training function. Training is still controlled in part by the V.P., through the exercise of permissive authority. This may still be necessary because there may be expensive travel involved in the training recommended by the supervisor. The key punching section will have grown to several persons, and one of them is in nominal charge, if not actually assigned as supervisor of the punching section. The V.P. retains the function of morale because he still has control of hours of work, pay, vacations and so forth.

The manufacturer's representative has disappeared from his advisory position. Independence of the manufacturer's technical and applications aid is a goal to be gained just as soon as possible. Assistance or advice from a source over which the administration has no control tends to be extremely intermittent, and therefore unreliable, albeit in this case it is probably very competent. Reliance on this source of aid, particularly if the request is initiated by someone above the supervisor, is not conducive to good morale and will affect his self-confidence. Let him ask for help if he needs it.

Close Attention Required

Close attention by the administration is required to see that the supervisor is actually performing the functions he has assumed or that have been delegated to him. Meetings held for the purpose of reorganization will be helpful in determining how these functions are being handled. A way to examine the supervisor's progress in the planning area is to ask to see the written procedures for new applications before they are installed. The absence of this fundamental work may indicate the need for counsel with the man to impress upon him the importance of long-range planning.

After several years of operation, the installation normally will have grown to include two accounting machines and more than one of the auxiliary machines. The staff of the department has also grown as more work is drawn from various sections of the organization.

Figure 3 shows how the data processing department can be organized so that all functions are handled within the department itself. This assumes that the organization has grown enough to support a more elaborate organization. There is no rule of thumb as to the size of institution needed before a larger machine department is required. The only criteria that may be safely used are the number of different applications being performed and the actual machine utilization.

Executive Post

A frequent course of action is to establish the executive post of director of data processing, which we see here for the first time. The position may be filled by hiring a man from outside the institution. This may be done instead of promoting the present supervisor for several reasons: (1) The supervisor does not have the educational background of a college degree. This status giving qualification is often ignored to promote men of ability. (2) Another reason for not promoting the supervisor to this post would be that he has not demonstrated the executive ability to handle the larger assignments.

Note that the director has assumed two functions new to the department: administration and morale. Administration carries with it the need to operate a departmental budget. This will require a degree of maturity that the supervisor may or may not have. In addition, the position requires the ability to see the total condition of the department. The supervisor will tend to think of the most minute details, when what is needed is a view of the over-all management of all the jobs.

Obtaining a director with the desired qualities is not easy. This type of person will be hard to draw into the job because he generally will be successful in his present work. Some inducements that may be attractive to such a person are:

1. Salary large enough to provide a sense of social status and large

enough to attract him from his present employment.

2. Opportunity to work for an advanced degree of responsibility.

3. Executive status.

4. Administrative as well as executive authority over the entire department.

A review of the three stages of organization shows that the supervisor has had responsibility for only two functions throughout, except where independence from outside aid required that he assume the planning function before he had a staff to whom he could delegate the performance of the work. He has consistently retained the functions of coordination and performance. The reason for limiting his responsibility to only those functions lies in the nature of the work.

It is a full-time job for one man to carry out the routine procedures and supervise the employes of the department in the most effective manner. If he is relieved of the burden of responsibility for the other functions, his entire attention can be devoted to getting out the work. Painstaking attention to detail is required in machine accounting, and it would take an unusual degree of flexibility in a man constantly to switch from machine operation to, say, application planning. It can be a frustrating experience to a good supervisor to feel he is falling down on the job in such an area as planning because he cannot take the time away from his other functions.

The point is to be careful not to subdivide the man's talents beyond the reasonable limits shown in the organization charts. Unfortunately, the common practice is to do just that. The resulting poor planning and erratic production of reports from many installations cause dissatisfaction in the administration and give rise to many laments over late results.

As the expense of the data processing department grows, it is only good long-range planning to provide proper direction for the expenditure of these funds. Wherever your installation stands in its development, the time to plan the next step is now. You can easily let the supervisor take his own course, accept his recommendations, and watch the department grow, but you will have the best control over it if there is a well qualified man in charge who is on the executive staff of the organization. ■

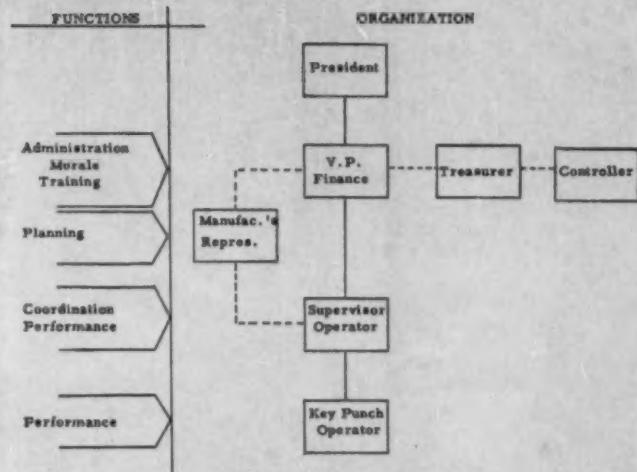


Figure 1

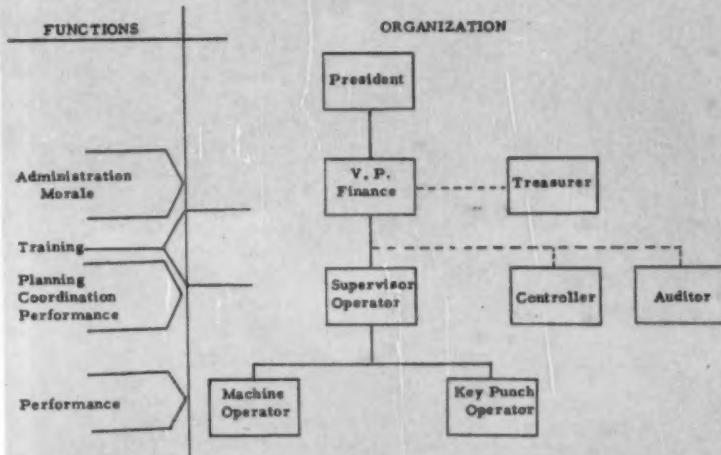


Figure 2

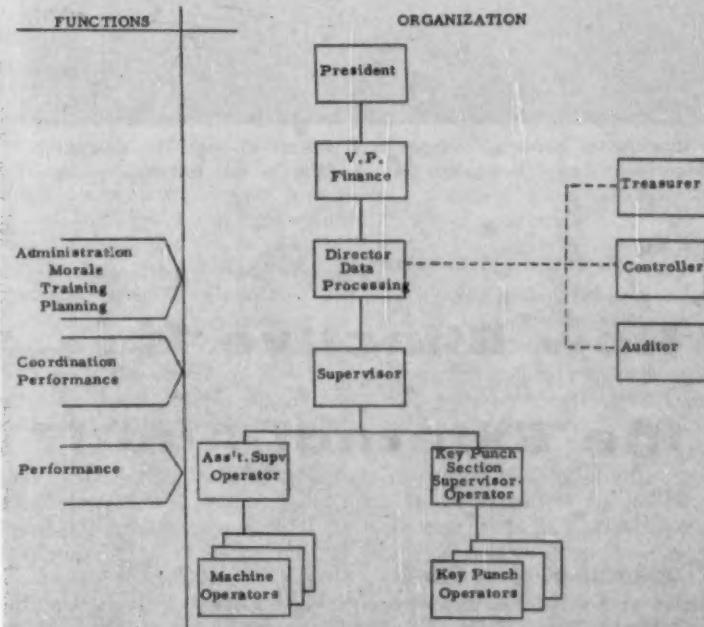


Figure 3



The relationship between colleges and universities and the external auditors has shown a marked improvement in the last two years.

How Effective Is the External Audit?

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THE audit is a vital and necessary part of the financial structure of any college or university. That an annual audit is necessary was well expressed by the National Committee on Standard Reports for Institutions of Higher Education: "The accounts of every college and university should be audited at least annually by independent accountants properly qualified for such work. The extent and scope of the audit will depend upon the need and desires of the institution, and the adequacy of the accounting system and the nature of the system of internal check. If the auditors prepare the financial statements, they should be requested to follow as closely as possible the forms recommended by this committee."

In order to discover how effective the external audit is, a survey was made, under a Carnegie Corporation research grant, for the 1958 University of Omaha Short Course for College Business Management. Questionnaires were mailed to 147 small and medium sized private colleges and universities. The 113 responses indicate considerable interest in the subject.

The need for an external audit is demonstrated by the answers to the question: "Do you have an external audit in your institution?" "Yes" answers totaled 107, and qualifying answers showing audits of a type were commented upon by two colleges. The question was not answered by four schools.

Thirty-four of the colleges are audited by national firms, 62 by local firms, and 17 by other means, mostly by church boards. Of the national firms, 21 are assigned specialists in college accounting. Of the local firms, 25 are assigned specialists, and in the other category nine were assigned specialists in college accounting. One hundred and two responded that their auditors were following generally accepted college accounting principles, with eight giving a "no" answer. Sixty-five colleges checked "no" to the question: "Have you had to train your outside auditors in generally accepted college accounting principles?" Forty-

one checked "yes." It is interesting to note that only three of the 41 believed that there had not been an improvement over a period of time.

A rather surprising response was given to the question: "Who chooses your external auditor?" Although 80 stated that the governing board chose the external auditor, 23 indicated that the administrative office had the choice. Henry G. Badger, in his "Junior College Accounting Manual," had this to say: "It is far safer for the board to employ an auditor or auditing firm, to contract with this auditor with respect to what the scope of the audit shall be, and to pay him an agreed fee at an agreed rate for his services."

John D. Millett, in "Financing Higher Education in the United States," was even firmer in his statement: "It is entirely reasonable for boards of trustees to insist that they themselves shall appoint the auditors to make an annual inspection of the fidelity with which fiscal accounts of an institution are maintained. In their capacity as trustees, boards certainly have this responsibility and are generally disposed to take it seriously. Thus, auditing reports, which usually accompany a treasurer's own report, are addressed to the board of trustees, not to the president. Auditing provides the one important independent check upon the administrative offices of a college or university."

Visit 63 Colleges

Preliminary or interim visits by the auditors were made to 63 colleges, while they were not made to 48. Work papers and/or statements were prepared for the auditors by 87 schools. Only eight colleges signified that it was necessary for the auditors to bring business office records up to date.

The auditors prepare the financial statements for 32 of the colleges, while the college business office prepares the statements in 66 of the schools. Eight schools stated that both the auditors and the college business office prepare financial statements.

Ninety-two schools considered the time the auditors spent at their college adequate, six considered it not adequate, and 16 believed too much time was spent. Only 14 schools believed the auditor's fees were too high, 72

From a paper presented at the short course in college business management, University of Omaha.

felt they were adequate, and 26 had a reduced scale of fees.

The auditors helped set up more efficient methods or procedures in 96 of the colleges. Ninety-seven of the colleges stated that they attempted to follow auditor's recommendations as specified on the annual report. That the college was getting as much attention as the average commercial enterprise was expressed in the affirmative by 95 universities.

In response to the question, "Do you call on your accounting firm for advice and counsel during the year?" seven checked often, 94 said sometimes, and 11 checked not at all. Sixty-two colleges believed that their auditors were studying some of the problems of college business administration.

Change Auditors Seldom

The tendency of most of the colleges reporting was to keep the same auditing firm for a number of years, with the schools seldom changing firms.

Fifty-nine of the schools reported they had no choice in the selection of the auditor, 29 stated they had a choice, and 17 had considerable choice. Most of the schools would not make a change even if they had a choice of outside auditing firms, although 12 schools would prefer specialists in college and university accounting, and nine specified miscellaneous reasons for changing auditors.

As was to be expected, the answers to the question, "About how much time is spent by the auditors on work at your university?" were varied, ranging from one day to two months. The amount of time spent depends on numerous factors: number of auditors, size of the college, type of audit, condition of accounts, and other factors. It would be difficult to arrive at an average because of the many variables.

Only eight colleges reported they received their auditor's report in four weeks or less after the close of the fiscal year; 52 received theirs in from one month to two months; 30 in from two to three months; 12 in from three to four months; two in from four to five months, and four in from five to six months. The large majority, 90 colleges, received their reports in three months or less after the close of the fiscal year.

"Do the auditors do an effective job?" was the key question, followed by "Please comment." The answers to

it are a credit to the auditing profession and the service it is rendering to colleges and universities. Not only were there 89 "yes" answers, but 25 of the colleges emphasized the very thorough job that is being done.

Most colleges were of the opinion that they could best help the auditors by having their records up to date, doing a complete job of accounting, preparing work sheets and/or statements for the auditors, following the auditors' recommendations, having other records readily accessible, and working more closely with the auditors. A few mentioned educating the auditors in college and university accounting. The answers seem to indicate that one of the continual problems of the majority of college business offices is to have the time, personnel and procedures to keep business office records on a current basis.

"How can the auditors best help the university?" The answers to this question fell into two main categories: (1) The auditors should be more conversant with the general principles of college and university accounting and business administration and with the specific problems of the audited school. (2) The auditors should suggest and help set up and reevaluate systems and procedures.

In the July 1939 *Journal of Accountancy*, A. Robert Seass in a challenging article asked the following question: "Should public accountants aid in the business management of our colleges and universities by counseling and advising those responsible for such management?" He also made the following statement: "It is unfortunate but true that most business officers who consider their audits satisfactory feel that they have had to train their outside accountants."

Relationship Improves

The relationship between colleges and the external auditors has shown a marked improvement in the last 20 years. The external auditor is rendering a valuable service to the colleges and universities throughout the country, and the colleges are asking and receiving much valuable help.

On the basis of the present research, the external audit, with some exceptions, is effective for small and medium sized private colleges and universities, and would seem likely to become more helpful in the future. ■



Traditional Housemother. She may be a good mother figure but resist changing times.



Social Hostess. The faculty widow or an alumna may enjoy certain social prestige but may lack any formal higher education.



Faculty Member. Generally unmarried, she may accept a residence hall job but she sees herself as a "keeper of quiet hours."

Newer Patterns for

STAFFING RESIDENCE HALLS

TO STUDY patterns for staffing residence halls, we must analyze what we are now doing, review present procedures critically, and evaluate these procedures in the light of the educational aims for residence halls.

Some of the present patterns for staffing residences may well go back for half a century or longer. The beginning of our present-day views toward student residences probably can be traced in part to Dewey's emphasis on social responsibility of the school; he viewed an "embryonic social community" in which students could practice the social skills that they would require in later life.¹ Social convention and the adverse public reaction to the idea of coeducation required colleges to provide not only housing for women students but also social supervision and chaperonage.² For the most part, these factors did not exist for men students.

From a paper presented at the meeting of the American Personnel Guidance Association, St. Louis.

¹Barry and Wolf: *Modern Issues in Guidance Personnel Work*, 1957, p. 16.

²Op. cit., p. 19.

During the years there has been a wide variety in types of housing, which included college or university halls, boarding clubs, fraternity and sorority houses, cooperative work plan houses, and rented rooms or apartments. The relatively new trend in student housing is toward the large university-built residence hall, housing several hundreds of students, or a group or cluster of halls housing several thousands of students. These large halls may be for men or for women or may provide coeducational housing. Often, more students are housed under one roof in these new residence halls than the total student population of many small colleges or even the total population of the student's home town.

The college personnel worker is faced with the demand for quick decisions. He may be forced to compromise personnel principles to satisfy the demands of building costs, maintenance costs, and food costs. Providing a well trained staff for buildings of this size is currently a most serious problem.

Let us briefly discuss some general patterns for staffing halls. I shall point out strong points as well as weak points in these patterns, and try to be critical in order to stimulate thinking.

1. The traditional housemother, "parent substitute," has been used for many years, and still is used today in many small living units. The housemother usually has had little formal education; may be a "good mother" figure; may be either a stern disciplinarian or a benevolent matriarch. She is sometimes described as unflinching, unchanging and unrelenting in her devotion to duty. She may resist the changing times and the points of view of the new and younger staff, and be impervious to inservice training.

If there are no age or educational requirements set for the housemother position, then the supply more nearly equals the demand. Salary requirements are usually quite reasonable if the housemother has pleasant, comfortable quarters and a certain social prestige associated with the position. Except in the rare instance of an ex-



Professionally Trained Person. She may work part time in residence hall and also have counseling and testing responsibilities.



Professionally Trained Person. She may work full time with the residence hall program, assisted by selected undergraduates.



Mature Woman. She is in training for a career in residence hall counseling.

erroneous conclusion that such jobs are not intellectually challenging, whereas, in fact, there is tremendous opportunity for the academic person in a residence hall staff position. Little or no data are available on the salary paid the faculty member living in residence; it may not be much more than maintenance, apartment and meals in some institutions.

4. The professionally trained staff person works part time in the residence halls and has responsibilities in the counseling or testing service, activities office, the dean of men's or the dean of women's office. The staff salary can then be divided between the residence hall and the department budget, the amount charged against the self-liquidating halls thus being reduced. Through such division of duties, it is thought that staff members may be happier because they are not "confined" to the halls; their points of view are broader, and coordination is improved with the campus agencies.

Possibly, better trained and more able employees are obtained for the halls by use of the professional staff from the personnel services on the campus. But the critical question is whether the residence hall job is really half time, or is a full-time job *only* half done. Can the professionally trained staff member gain personal satisfaction from half-time work in two departments? Does this arrangement adequately meet educational goals?

5. The professionally trained staff person works full time with the residence hall counseling program and is assisted by selected undergraduate students. They may be sophomore students working in a freshman hall, juniors working with their sister class of freshmen, or selected seniors working with any one of the other classes. In rare and unusual instances the halls

By **EUNICE M. DOWSE**

Assistant Dean of Women, University of Illinois

ceptional and unusual person, the housemother does not further the educational ideals and program of the house to any extent.

2. There is the "social hostess," who may be a faculty widow or an alumna. She may enjoy a certain social prestige from her husband's business or profession, and often has cultural interests and some travel background, but not necessarily any formal higher education. She may be employed full time in a fraternity or sorority, or part time in the men's halls during the hours they are open for entertaining women guests. Some serve as social hostesses in the women's halls.

The social hostess, employed full time in the larger units, may receive a cash salary slightly higher than the housemother. The supply is fairly adequate if there are no education or age requirements. She seldom participates in inservice training, and makes relatively few referrals. Such a person is thought to be adequate for staffing residence units if there is a provision elsewhere on campus for the general

counseling functions, advising the student government organization, activity program, and academic advising.

3. A faculty member may be the staff person in charge of a men's or a women's hall, a fraternity, a sorority or sometimes the smaller living units on the small campus. The faculty member who lives in the residence unit generally is unmarried. This pattern may have started with the housemaster tradition. A few men's halls have a faculty member and his wife in charge of the unit, but this plan generally is not possible in women's halls for lack of adequate apartment space or location.

Relatively few faculty members are willing to take this type of responsibility. They seem to consider residence hall work to be nonacademic in nature, perhaps disciplinary, or top-heavy with maintenance or housekeeping details. They look upon the residence hall staff member as a "keeper of quiet hours," the "window closer," or the "dispenser of light bulbs."

Overemphasis on such trivial aspects of the job often results in the

are almost completely managed by undergraduate students with assigned responsibilities and functions normally carried by professionally trained staff. Such student assistants are used as staff in both men's and women's halls.

Following World War II, older, responsible veterans were utilized in lieu of graduate students or other staff members. The pattern may also have developed in institutions where there is very little or no graduate instruction, and consequently few graduate students available to work and live in the halls. In still other instances, undergraduate assistants are the only possible method of staffing halls because of budget problems. Their remuneration in terms of room and board is much less than the salaries for trained residence hall staff.

How Much Can Be Expected?

Critically, one must ask to what extent undergraduates can carry counseling responsibilities. Can they foster the educational aims of the residence unit? Are these upperclass students recognized by the faculty and other personnel agencies as a part of the counseling services of the campus? How much does the administration have a right to ask of them?

6. The professionally trained staff person works full time and supervises the graduate intern training program in the halls. This pattern was established, in some instances, because trained personnel was not otherwise available. It is more predominant in women's halls than in men's. Such a program demands that the institution be able to attract graduate students to the campus in sufficient number to be able to select good candidates for intern training.

The personnel program and the inservice training in the halls must be recognized by the academic department supervising the graduate training. While the pattern may provide an inexpensive way of staffing halls, one must recognize the strengths and weaknesses of such a plan. Does the undergraduate student suffer from the constantly passing parade of graduate interns who are practicing their learning skills on the student residents? What responsibilities do the interns carry in the area of general counseling with the students? Can the ratio of trained staff to interns be kept small enough to provide adequate supervi-

sion and training for them? Is the fact that the intern is available only as a part-time worker sometimes overlooked?

7. The professionally trained staff person works full time with part-time graduate assistants who are not in an intern training program. This pattern exists in many institutions and in both men's halls and women's halls. Again, there must be a graduate college on the campus large enough to attract graduate students who wish to work in the residence halls. The terms of the assistantship offered to them must compare favorably with the assistantships offered in academic departments. There must be an understanding of the residence hall program on the part of faculty advisers in the various graduate departments as well as an appreciation of the learning experience offered in the halls, through the educational, cultural and counseling programs.

Some advantages exist for students in the halls when they have graduate assistants on the staff from a number of academic departments. Graduate assistants may come from other campuses and bring a new point of view to the residence unit, as well as a source of inspiration to the undergraduates because of their diverse academic backgrounds. They provide a much needed in-between step between the student resident, the student leaders, and the professionally trained staff in charge of a large hall or a group of halls.

Critically, we must recognize that these graduate assistants, not necessarily personnel minded, have certain limits in the work they can do. The passing parade of graduate assistants must be oriented every year or two. They must be quickly and adequately trained for the role that they are expected to assume in the residence hall.

8. Mature women are trained for a career in residence hall counseling. Because of the need for trained staff members, the need for continuity in the field, and the need for looking upon this job as a career, the University of Illinois has started an inservice personnel training program for a group of older women. In addition to other selective factors, preference is given to a college degree and age between 40 and 55 years. The program has proved most satisfactory in partially meeting the need for staff.

The staff members described have been those who would be responsible to the dean of students, the dean of men, the dean of women, or the director of the counseling services. Let us not overlook the fact that residence halls on some campuses are considered a business enterprise. In these instances, the staff members are responsible to a business officer. Their major responsibility may be business, clerical, housekeeping or maintenance rather than educational. On some campuses, a business officer may attempt to fulfill his educational obligations by assigning a senior or graduate student as a proctor. I believe that the educational program is the prerogative of the personnel service.

On other campuses, the residence hall staff may be responsible to a maintenance department. In this case, more emphasis generally is placed upon the housekeeping and custodial services than on any other feature. Frequently, the person in charge may be the housekeeper or the dietitian. In any of these cases, however well meaning the individual, the educational program is seldom the primary objective.

Some Have Several Patterns

Some campuses have several of these staffing patterns in operation at one time, depending upon tradition on the campus, the size of the unit, and whether it is institutionally owned or privately sponsored.

The need exists for analysis, for critical review, and for evaluation of the patterns for staffing residence halls. We must set up educational goals. We must realize the educational potential of the residence unit, recognize what we have done in the name of expediency, recognize where we should be going, find a way to get there, and select and train our staff for the educational goals set.

Let us professionalize the position of the residence hall staff. Let us adequately train staff for the larger residence hall. Let us make a career of residence hall counseling.

We must use every means at our disposal to budget an adequate salary for the professionally trained residence hall counselor. Let us coordinate the counseling program in the residence halls with the counseling services, integrating the work with that of the faculty advisers and representatives of the other agencies of the campus. ■

THE PROFESSOR and HIS "RIGHT OF SILENCE"

T. E. BLACKWELL

Educational Management Consultant
Washington University, St. Louis

IN MAY of 1959, the court of appeals of New York was called upon to decide a case involving the refusal of a college professor to identify other college personnel as past or present members of the Communist party, thereby invoking an alleged "right of silence." He did not raise the question of his constitutional rights under the Fifth Amendment. He asserted a right to decline to answer the questions of his governing board with respect not to his own activities, but to those of his friends and associates.

Under the provisions of the Feinberg Law (N.Y. Education Law, 3022), the state legislature had directed the board of regents of the University of the State of New York to adopt rules and regulations for the enforcement of all laws prohibiting subversives from obtaining or retaining employment in the public educational system of the state. The legislature directed the local boards of education to enforce such laws, but it did not direct them to employ a particular method in ridding the schools of subversives.

Acting upon this legislative mandate, the board of education of the city of New York dismissed an associate professor at Hunter College for refusing to answer questions about the "past or present membership of municipal college staff members in the Communist party." The professor requested the commissioner of education of the state of New York to review this action of his board. The commissioner ordered his reinstatement, but ruled that he should be given an opportunity to answer questions with respect to statistics of faculty membership in the Communist party, without revealing the identity of individual members involved.

In support of his ruling, the commissioner declared: "(1) The problem affects the administrations of our en-

tiere educational system; (2) there is near unanimity on the part of teachers throughout the state that indiscriminate use of this type of interrogation engenders an atmosphere of suspicion and uneasiness in the schools and colleges; (3) trust, which is necessary to keep morale at a high level, is undermined; (4) it is notorious that part of the Communist philosophy encompasses falsehood as a means to an end; (5) the allegation by a member or former member of this organization, standing alone, could well be untrustworthy, yet it levels a deadly suspicion, which is most difficult to disprove; (6) a school system which sets one teacher against another in this manner is not conducive toward the strength and cohesion which needs to exist in order to instill character into the student body; (7) as is said in the *New York Times* in an editorial, a fundamental reason for forbidding the interrogation is that 'it establishes as an official test of faith a teacher's willingness to act as an informer'; (8) in the over-all administration of the public school system . . . the institution of the policy under consideration here would do more harm than good; (9) consequently, this type of inquisition has no place in the school system."

The board of education requested a court review and an annulment of the ruling of the commissioner. In its petition for review, the board argued that the commissioner's decision prevented the enforcement of the Feinberg Law and that it represented an illegal attempt, in the guise of an administrative determination, to nullify and repeal the statute.

Majority Opinion

The court of appeals upheld¹ the ruling of the commissioner on the grounds that he had not exceeded the scope of authority and power conferred upon him by the legislature. Judge Conway spoke for the majority of the court:

"If the enforcement of our laws were to depend upon informers alone, as the board appears to contend is the fact as to the Feinberg Law, we would live in a chaotic state. Those charged with the duty of enforcement know this and so resort to other traditional methods for obtaining the desired in-

formation. The board must do likewise. For example, the board is free to question as many of its employes as it wishes concerning their own membership in the Communist party. And, we suppose, the board could use investigators to examine into the background and associations of its employees.

"We stress the fact that we are not passing upon the determination of the commissioner nor are we holding that members of the teaching profession in this state are exempt from citizenship responsibilities imposed not only upon all public servants, but on individuals as well. We are merely discharging our judicial function of interpretation of the legislative will. The lawmakers have the right and power to prescribe the commissioner's powers and to circumscribe our scope of review of his determination."

Judge Burke registered a vigorous dissent. The following are excerpts from his opinion:

"The commissioner of education does not have the power to approve a code of behavior which, by a conspiracy of silence, has frustrated the investigation into subversion in the school system of New York City.

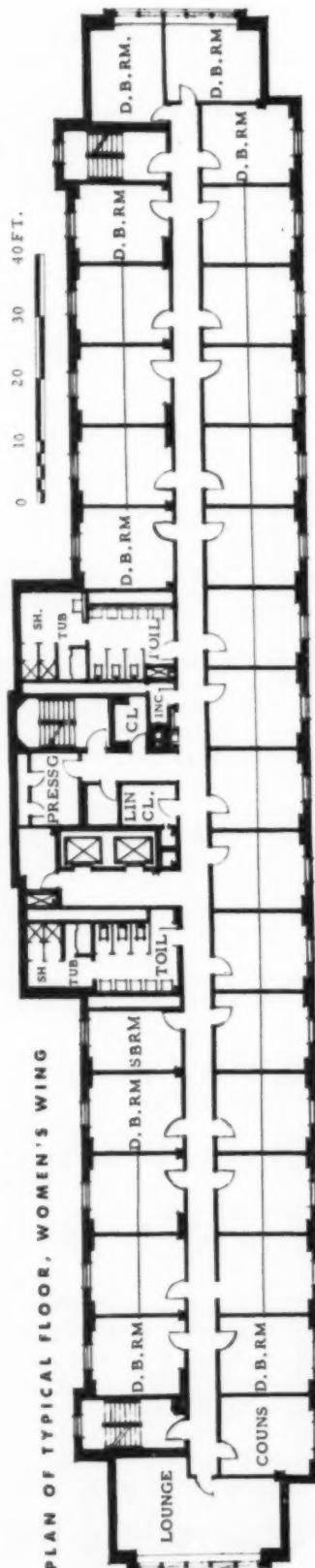
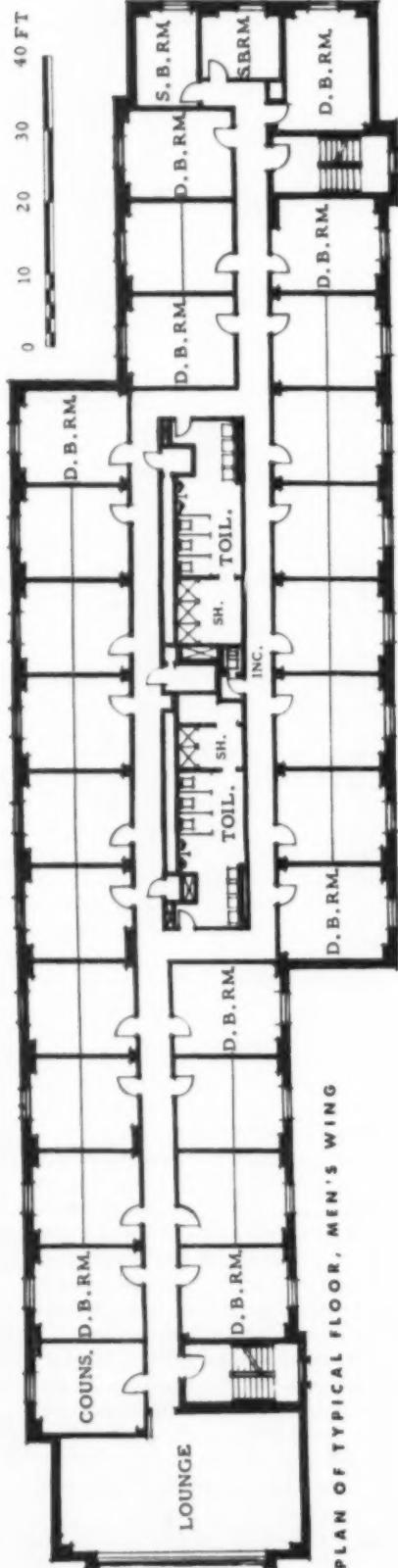
"The kind of 'right to silence' adverted to in the cases cited by the respondent teachers is not involved in this case. The right to remain silent exists only where there is no corresponding duty to speak. Here, the teachers assert not only their right to remain silent, but also assert that, despite their silence, they are to remain in public employment. . . . To date, however, the U. S. Supreme Court has not found that those partaking of the 'right to silence' in subversion cases must be subsidized by the government or by agencies of government. . . .

"The obligation of teachers to cooperate fully with their employer in enforcing a public policy of this state should not be considered less than that of any other citizen but greater. Refusal to cooperate seriously reflects upon their ability and capacity to hold a position of trust and confidence."

Many states have enacted "loyalty" statutes, similar in character to the Feinberg Law, in order to bar subversives from public employment.² These include the Levering Act of California and the Ober Law of Maryland. ■

¹Board of Education of the City of New York v. Allen, 6 N. Y. 2d 127, 188 N. Y. S. 2d 515, 160 N. E. 2d 60 (1959).

²Chamberlain, Lawrence H.: Loyalty and Legislative Action, Cornell University Press (1951), Ithaca, N. Y.



Coed Residence Halls

**Indiana University
links dormitories
and dining hall
by means of arcades**

ALICE NELSON

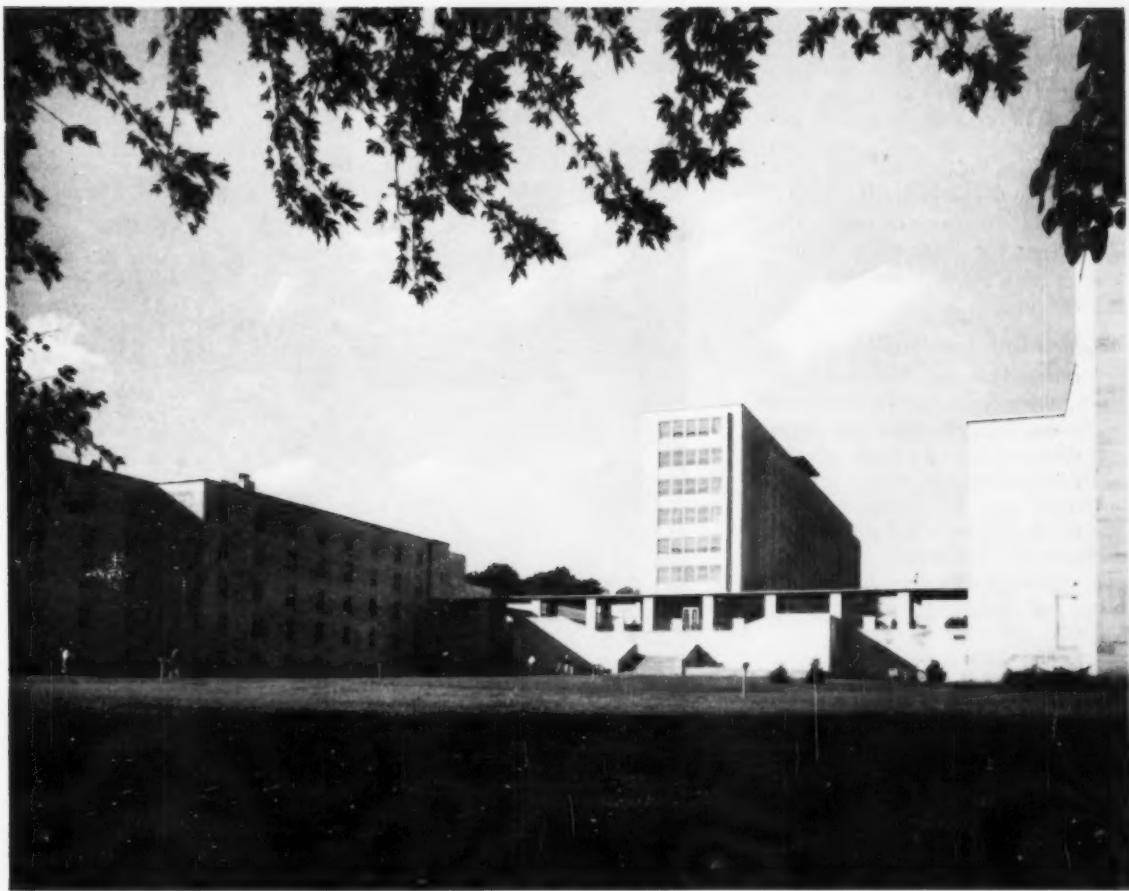
Director
Halls of Residence
Indiana University, Bloomington

Men must be taught as if you taught them not. — Alexander Pope.

P OPE didn't know too much about university residence halls for there couldn't have been many of them in his day, but he certainly depicted what a lot of us are trying to do in our residence halls for men and women students.

Last September Indiana University opened a new educational residence hall made up of six structures — four buildings for men, three to four stories high, and one building for women, eight stories high, and a dining room building that contains the main kitchen, four large dining rooms, and a small private dining room. The tall center building houses 316 women;

The four buildings for men are three or four stories high. The one building for women is eight stories high. For food service, there are four large dining rooms and a private one.



Indiana's Tower Quadrangle, showing arcades that link dining hall (center) with men's and women's dormitories.

Portion of main lounge. Each floor has smaller lounge.



Student room. Some are single rooms; some are double.



the four outlying buildings, 886 men, together with the counseling staff.

Each floor of each building is arranged horizontally as a separate house. Approximately 50 students occupy the double and single rooms; in addition each "house" has two bathrooms, a large lounge for the 50 students, and a counselor's room. The girls' unit has long gown closets, kitchenette, shampoo facilities, and the like.

Arcades Link Buildings

Arcades link the six buildings. Under the arcades are the recreation rooms for the five units. The three recreation rooms on the south side can be thrown together to provide a fairly large dance area. The two on the north side are divided by a hi-fi room and a darkroom for photography. All recreation rooms are equipped for shuffleboard and ping pong and have chess and card tables and a piano.

The first floor of the tall building where the girls live has the central office with its mailboxes, suites for head residents, a main lounge, and a library to be used by both men and women. In addition, there are a kitchenette to serve the main lounge and a night-hostess room and bath. Two high-speed elevators serve the residents. The five sun bathing areas on the roofs have been screened so that it is impossible to see from one to the other.

The old custom was to build men's residence halls on one side of the campus and women's residence halls on the other, and then to spend a good deal of money on mixers and exchange dinners to get the young people acquainted.

During World War II we housed a large naval contingent. Some 600 Waves arrived before all of the 1200 navy men had departed, and we found to our astonishment that we had few difficulties. In fact, many problems were erased completely as the young sailors were more courteous, careful in their speech, and contented in their surroundings. The Waves were equally well behaved.

Since the war we have developed these coeducational centers, and we now have a group of nine buildings for graduate students — five occupied by men, three occupied by women, and a central dining hall and lounge building. In another section we have a



Dinner can be more leisurely for it is a served meal. Breakfast and lunch

group of buildings occupied by undergraduate students where there are five buildings for men, three for women, and the central dining hall.

This time we are carrying the arrangement one step farther. We are placing a great deal of emphasis on scholarship and the development of the students' interests in various phases of education. In addition to the regular counselor on the floor with each 50 students, we have an educational counselor. His primary interest is scholarship: developing the curiosity of the students under him not only in the possibilities of their own field but also those available in other fields of learning. Both the academic and the regular counselors are responsible

to the head resident and his assistant, who live in the girls' building.

Encourage Study Habits

In each building are several small rooms that can be used as study rooms by the student who wants to type or who prefers to work alone, or by a group of two or three who want to work on some special problem. For some time we have operated one dining room from 7 until 10 p.m. as a supervised study hall, with a responsible person in charge. In one dining hall is a long paneled wall accommodating 1500 or 2000 reference books from the main library. Thus we hope to encourage study habits and eliminate the trek to the main library at night.



are cafeteria style. This is a view of one of the four large dining rooms.

Since this new group of buildings houses freshmen primarily, having the reference library in the air conditioned dining room is a great advantage, for they are not permitted to leave the halls after 7:30 on most school nights. The library on the main floor of the girls' building is chiefly a browsing library but also invites study at any time.

No Posts To Obstruct View

The four dining halls, located off of two counter lines, are large airy rooms so arranged that each two can be thrown together for a larger space if needed. No posts obstruct the view at banquets. The soiled dish conveyor is located around the outside of the

rooms in a deep trough of stainless steel.

Breakfast and lunch are cafeteria style, with dinner a served meal so that students can enjoy their food in a more leisurely fashion. With both men and women in the dining halls, we feel they will become acquainted in a more normal manner and will acquire better manners, improved dress, and greater respect for one another. They can exchange ideas in a more homelike atmosphere.

Great care was taken in planning the kitchen to make it sanitary, attractive and efficient, and to reduce the labor problem. Refrigerators were built close to the unit that uses them rather than being placed in a bank

somewhere. While the original cost might be a little more, we believe the saving of labor will soon offset the higher first cost. We are also using a great deal of "rolling equipment."

Every effort has been made to make these buildings as maintenance-free as possible. For example, all rooms have marble window sills. Double hung windows in student rooms have proved most satisfactory. All drawers open by means of a slot at the bottom of the drawers so there are no drawer pulls to keep coming off. A good deal of marble has been used in the bathrooms.

Pipes Have Identifying Color

In the mechanical rooms pipes are painted individual colors so that repairmen have no problem identifying a cold water line, a hot water line, or a steam line.

From the comfort angle we have worked very hard to prevent irritating the student by his surroundings. Double rooms are 204 square feet; each student has 5 feet of closet space; the beds are 80 inches long and have comfortable innerspring mattresses. We have installed rubber plugs in all metal door bucks to eliminate noise. There are two bathrooms on each floor in a center island, with the outside door opening against a blank wall. Rugs with pads under them in all student rooms prevent transmission of noise from floor to floor. In addition, there is a telephone in each room and this reduces corridor noise.

Construction costs for these buildings for 1202 students were \$4756 per student, or \$19.60 per square foot. Furnishings amounted to \$307.40 per student. This includes all furnishings for lounges and dining rooms, the draperies, and student room furnishings including the bedding.

These buildings were financed by a bond issue, and are being paid for by the income derived from the occupants. The university's policy is that the structures be so built that the last bondholder has as good a building as the first.

The exteriors are of Indiana limestone. A great deal of color has been used on the interiors — to make the buildings attractive but also to teach the occupants indirectly the right color combinations and good design. Thus, we say: "These are educational residence halls for both men and women."



Left: Northern part of Flint's Community College and Cultural Center. The Whiting Auditorium in the center seats 2500. In the upper center is the historical museum, and at the upper right the transportation museum and exhibition hall.

The Community Center

Community Junior College Brings Culture to Flint, Mich.

WELLS BENNETT

Architectural Consultant, Detroit

CLYDE E. BLOCKER

Dean, Flint Community Junior College, Flint, Mich.

THE second major step in the development of the Flint Cultural Center was taken when the committee of sponsors and the board of education agreed to build and operate an expansion of the existing junior college campus, containing a planetarium, college theater, art center, swimming pool, historical and transportation museums, and a civic auditorium.

Planned for Community Use

The committee of sponsors, a group of citizens and business organizations, was organized in 1954 with "the determination to bring Flint educational and cultural distinction in keeping with its industrial renown." The board of education cooperated by agreeing to administer the funds and to oversee the administration and operation of the physical plant through the junior college administration. The program centered in the college but was planned to provide facilities for extensive community use through enrichment programs for public school students, adult education, and, in addition, a variety of programs of general interest. The result of this unique partnership has been the rapid expansion of facilities and programs.

The outstanding architectural quality of the north campus is primarily due to the abilities and enthusiastic interest of Flint's board of education and the committee of sponsors. The committee of sponsors is made up of public spirited community leaders

who are dedicated to obtaining funds for the construction and endowment of buildings in the Cultural Center. The minimum gift accepted by the committee is \$25,000, and the largest gift received to date is \$3 million from the General Motors Corporation. The committee has contributed funds for the construction of four buildings and plans to finance four additional buildings and the Carillon Tower.

A Detroit architectural firm, Smith, Hinelman and Grylls, was commissioned to design the general site plan for this area with Flint architects, Alexander Nurmi, and MacKenzie, Knuth & Klein, collaborating. This arrangement resulted in a high degree of unity for the total architectural effect. This site provides a broad east

and west mall or avenue replacing three blocks of the former Kearsley Street. It is intersected by a shorter cross-axis mall at the former Forest Street. The Detroit firm designed five of the seven projected buildings. Four buildings along the south side of the Kearsley mall are now complete.

The educational and community objectives of the board of education are being achieved through cooperative college and community use of all buildings. The northern section of the campus has attracted widespread interest and use by citizens of all ages.

The Bower Theater stands at the east end of the south line of buildings, its stage loft effectively marking the east end of the group and setting off

A former town house is now the music building. The carillon console is located in it, and all music instruction takes place here.





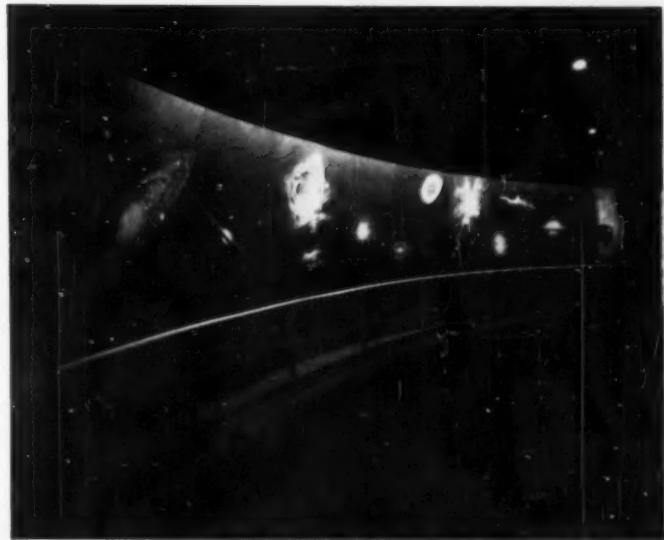
Left: Planetarium and reflecting pool. Constructed of reinforced steel, wire mesh and layers of gunite, the dome is finished with sealer containing carborundum chips and glitters in the light.

the theater itself in its covered portico opening toward the campus. An extension of this portico connects with the entrance to the Longway Planetarium placed to the south.

The planetarium, with its strikingly handsome dome, whether seen in perspective from across the campus green or reflected in the pool on which the paneled dome appears to float, is probably the most dramatic feature of the north campus. To the east of the pool the court of honor with appropriate inscribed pylons is a feature of the minor avenue. At the south end of this north and south axis a slender carillon structure will complete the composition.

The theater is a multipurpose building serving both the junior college and the community. The college uses the building for classes in speech and theater and to present an annual schedule of plays. The Flint Community Players, a community dramatic group of many years' standing, uses the theater for rehearsals and the presentation of seven or eight plays each year. The theater auditorium is available to public school groups and for community meetings.

Functionally, the planetarium is a highly specialized building used for the popular and academic study of astronomy. In it the planetarium staff conducts a variety of programs oriented to the needs of college students, public school pupils, and the community at large. Junior college classes are



Planetarium murals. The celestial bodies are painted with fluorescent paint and are lighted by ultraviolet lights in the ceiling.

held in the building, as well as special planetarium presentations for public school and community groups. The planetarium also features regular public shows of general interest and historical significance. Attendance at the planetarium exceeded 65,000 in 1959.

Light and inviting in character, the DeWaters Art Center, next along the main avenue, is particularly elegant and expressive of the functions it serves. The exhibition gallery, a higher single story in metal and glass, has a sparkling charm and, to the west, the

two-story wing, necessarily more self-contained in character, is designed around two courts open to the sky. A bronze sculptural group of birds hover over the east court against the sky; the west court opens through many-colored gate upon the campus lawn.

The cylindrical form of the ceramics kiln in a range of colors is a brilliant feature of the building's west facade. The range of studios includes drawing and painting, sculpture, metal work, ceramics, weaving and design.

The art center is the home of the



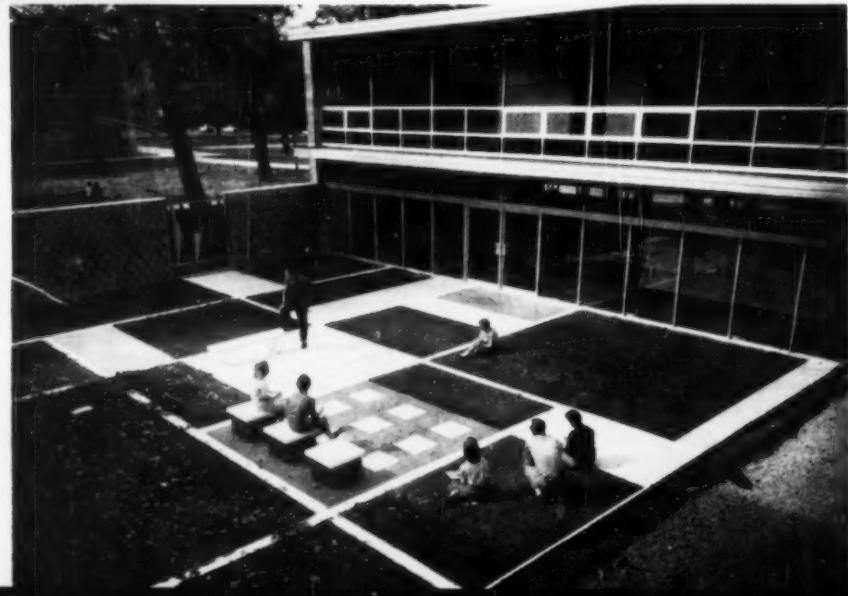
Flint Community Center, cont.

Top: Students view an abstraction in the art center foyer. The building has two interior courts that provide additional space in spring, summer and fall. Left: The sculpture "Flight," executed in bronze, by Bethold Schiwtz, rises out of one of the open courts in DeWaters Art Center.

Flint Institute of Arts, which offers a broad program of art exhibitions and lectures. The junior college has an active and complete art curriculum and special public school classes for gifted children meet in the building. In addition, the Mott Foundation completes the art offerings by sponsoring adult education classes in most media.

The Dort House on the north side of the mall is a large town house, classical in style, set in spacious grounds. It was acquired in 1958 and has been refurbished to provide quarters for the junior college music department and a number of community musical organizations. The structure was built in 1908 by J. Dallas Dort, Flint automotive pioneer. In addition to college mu-

Right: View of one of the interior courts of the DeWaters Art Center. The court features a decorative exterior brick wall, glass paneled walls, and a multicolored gate made of baked enamel steel.



sic classes, the console of the carillon has been temporarily located in the building. Future plans include the placement of radio and television facilities in this section of the campus.

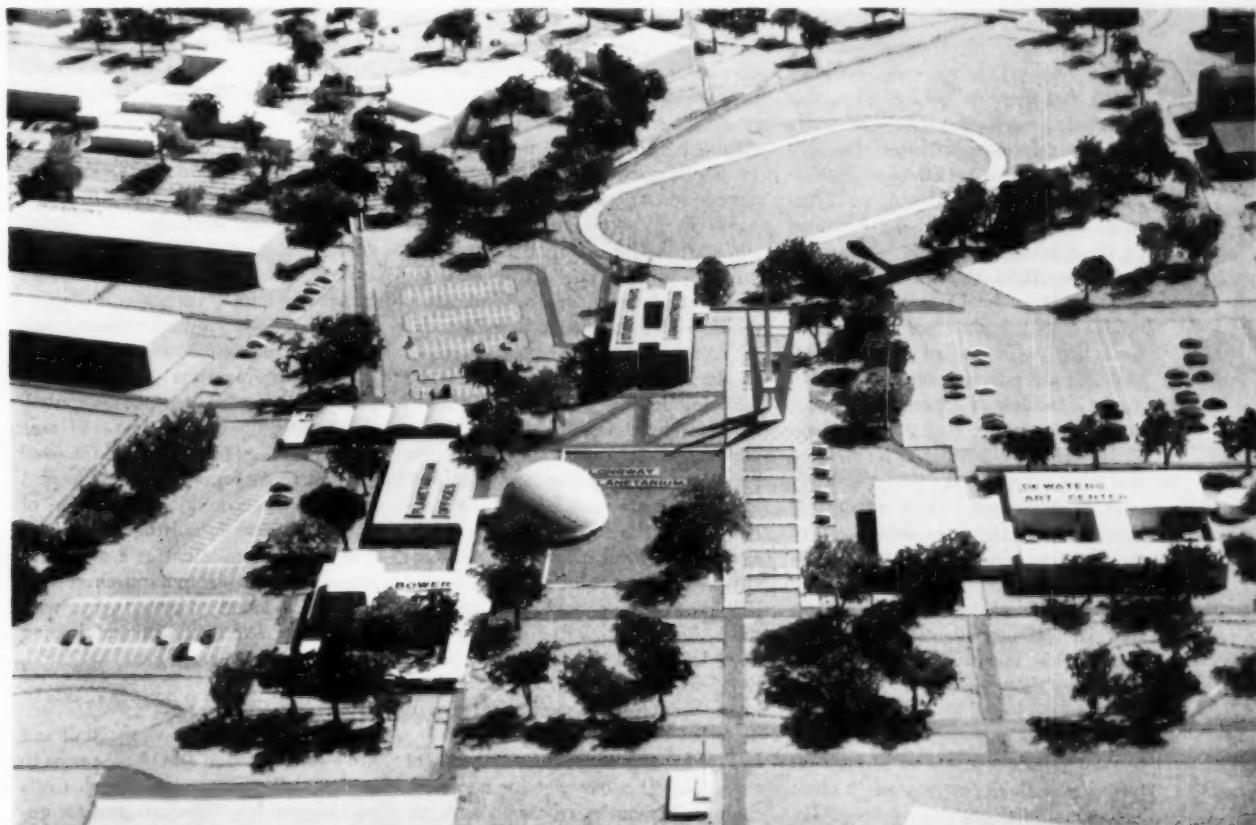
The public library was constructed by the board of education with tax funds. Its building is placed at the west end of the group and is administered by the public school division of the board of education. Its horizontal emphasis in mass and treatment of brick, metal and glass continues the character and color values established by the other architectural elements.

construction is under way at the northeast corner of the intersection with the north-south axis. Here the large Durant Plaza, slightly raised above the level of the malls, will form an impressive forecourt for the two museums to be built this year.

Along the north side the historical museum will be the home of the Bray Renaissance Art Collection, valued at \$500,000, and several regionally historic collections, all of which will be properly cared for and displayed here. The museum will be the regional center for historical materials and will be

hicles. The full use of the building will be programmed to provide a continuing panorama of old and new means of transportation. It is planned that for certain exhibitions Durant Plaza will become a part of the display space, for larger elements or constructions. Throughout the year there will be a variety of lectures, displays, discussions and demonstrations to illustrate the relationships between transportation and the general historical development of the United States.

To the west of the plaza, across the north and south avenue, will stand the



Model of Cultural Center showing the theater, planetarium and art center, in relation to other sections of the campus.

The library offers extensive services to the public in the main building and in strategically located schools. The adult services section gives specialized assistance to patrons in art, music and drama; business and industrial information; general reference materials; films, and phonograph records. A special children's department attracts young people of all ages to the library. On the north side of the avenue,

used for the enrichment of college, public school, and a number of community programs.

Flint, one of the original centers of the automotive industry, is the logical location of a transportation museum. This structure, the Alfred P. Sloan Museum of Transportation and Exhibition Building, will provide 104,000 square feet of space for the display of historical and current examples of ve-

Whiting Auditorium. This will seat some 2500 people and its architectural masses will dominate the campus and this section of town, featuring, in addition to the auditorium proper with its lobbies and back-stage services, a high stage loft to accommodate opera and large spectacles as well as other college and community audience needs.

North and south campus drives and parking areas will be coordinated. ■

A Purchasing Agent's Views on Food Procurement

NOW turning to certain other areas of food procurement, I shall make a few observations with regard to each area.

Canned Goods

The area of canned goods, which accounts for approximately 4.9 per cent of the food cost dollar, is one where careful procurement on a value analysis basis can certainly prove that there is "gold in them thar hills." I recommend two extremely valuable reference books on this subject: "Five Steps to Effective Institutional Food Buying" by A. A. Froomean, 1953 edition, and the Almanac of the Canning, Freezing, Preserving Industries, 1958 edition.

These two books provide a tremendously valuable amount of information with regard to specifications, minimum drained weights, grade identifications, producing areas, and canning seasons, all of which help to answer the questions of how, when and what to buy.

It is important, when requesting quotations, of requiring submission of samples, and of carrying out a scientific process, together with the dining halls operational staff, of the "can cutting" or testing evaluation before deciding what to buy. The wide variation of products offered by reputable suppliers and within even the same grade level is amazing. This variation can amount to as much as 30 per cent from low to high in terms of the best "value analysis" buy.

Can cutting of samples submitted by vendors is accomplished at Harvard by a committee consisting of a food buyer, the assistant director of the dining halls, and the central dietitian. The test should be conducted with the various sample cans code-marked and labels removed so that the test committee is unaware of the vendor and of the specific grade or brand involved.

First of all, it is important to check the drained weight, count or contents. Second, the testers should score the

sample on the basis of such factors as flavor, texture, color, uniformity, defects, syrup. Last, the price quoted should be established and a ratio set for each sample in terms of the price quoted per measure of drained weight. With all of this information at hand, the testers are in a position properly to evaluate the various samples in terms of the best over-all "value analysis" purchase.

Once a decision has been jointly made, the reasons for the decision should be recorded on the test sheet. In addition, we use a 5 by 8 inch canned goods purchase record card, again in a *portable* index file, that summarizes the essential procurement information. The portability of the file is intended to encourage and invite reference by the dining hall director's staff.

The appropriate time for requesting bids and testing samples would seem to span the period from June 15 to November 1, depending upon the canning season of the item involved. Before bids are requested, a basic decision must be made as to the minimum grade level below which the institution does not intend to go, and this information should be included in the bid request.

At least two general approaches to the problem of canned goods procurement are: fixed commitment for a period of time and spot purchase.

Fixed commitment for period of time. This is a contract for a period, such as 12 months, where an approximate consumption quantity is established and committed to a supplier based upon a fixed price per case, with perhaps a set storage charge per case per month applying after an agreed upon date. Such a method has the advantages of assuring continuity of quality and insurance of price guarantee in the event of unforeseen market factors that sometimes create upward changes in price.

Spot purchase. A second general approach is that of spot purchase where, after sample testing, a vendor-

quality-brand-price combination is agreed upon with knowledge by the vendor of the potential quantity consumption over a period of time but with no fixed commitment involved. If the vendor sees fit to require a price adjustment or if an alternative product-price combination of better value is submitted by another vendor, the buyer is free to shift.

While this method provides wide latitude of buyer decision and tends to keep price flexibly in step with market changes, its disadvantages include possible interruption of quality continuity and, perhaps, higher case prices either because of market changes or because the vendor has no assured guarantee of approximate quantity.

We have been buying canned goods on a spot purchase basis but are studying the problem as to whether a change in procedure is warranted. Some institutions in the Boston area assert that they have graphed the fixed commitment method against the spot purchase alternative over a period of years and have found that at no time was fixed commitment at a disadvantage pricewise to spot purchase and that the average advantage pricewise in favor of fixed commitment buying varies from 5 to 8 per cent.

Fresh Fruits and Vegetables

Many institutions have the staff and are located in such a market area as to permit daily shopping for fresh fruits and vegetables. These account for approximately 6.4 per cent of the food cost dollar. If the buyer or designated dining hall person has adequate experience for the job, market shopping can take full advantage of the difference between a vendor having *possession of goods for sale* or having to *buy for sale* under a competitive bid situation.

In a large institution, however, problems of advance menu planning and volume of requirement may inhibit or prevent market shopping. In such case, competitive bidding against

**Concluding a series
begun last month**

specifications for a weekly quantity requirement is appropriate, with inspection to be made by the buyer or the dining hall receiving personnel or perhaps on a spot-check basis occasionally by Department of Agriculture inspectors. In the latter connection, a grade specification of U.S. No. 1 is a good medium specification, since it is neither too high nor too low and is subject to fairly precise definition in the event of dispute with a vendor regarding quality.

Milk and Cream

This area of procurement, which accounts for approximately 14.8 per cent of the food cost dollar, is generally subject to qualifying regulations at the hands of either the federal government or state laws since the industry has a quasi-public utility status. Many regions throughout the country are subject to federal marketing orders that establish the price at which milk and cream must be sold by producers to processors. In the Boston area, when the federal marketing order price to producers is changed \$0.22 per hundredweight, this change converts itself into an automatic change in price from processor to consumer of \$0.005 per quart.

In Massachusetts and in many other states, a state milk control commission is operative whose responsibility it is to protect the community in terms of assurance of supply, to recommend changes in state legislation governing bacteria count, quality integrity, and so forth, and to protect the industry from cut-throat price competition at retail levels, which may threaten disruption of the industry. Usually state laws, at least in Massachusetts, require that milk not be sold below cost in retail or wholesale markets and, when an intra-industry commotion is created, the milk control commission may be empowered to fix prices at retail or wholesale.

Against this kind of background, procurement methods are hampered and made difficult. However, the

ROBERT S. MULLEN
Purchasing Agent
Harvard University, Cambridge, Mass.



cause of careful procurement is not lost. A thorough investigation of cost-price relationships, what other institutions are paying, and the possibilities of an annual requirements contract can lead to substantial savings in this significant area of food procurement.

Ice Cream

Ice cream, which accounts for approximately 5.2 per cent of the food cost dollar, lends itself to clear specification in terms of minimum butterfat mix (perhaps 11½ per cent for bulk and brick ice cream), minimum bacteria count (usually not more than 50,000 bacteria per cubic centimeter, standard plate count), and maximum of over-run (usually not in excess of 95 per cent for bulk and 80 per cent for brick). Over-run is, in effect, the amount of air pumped into the butterfat mixture to create proper consistency. Ice cream is also a product that lends itself readily to complete test by an outside testing agency at nominal cost to ensure that the specification is complied with.

Industry practice seems to be that the vendor will provide and maintain suitable refrigeration equipment for ice cream storage and that, in the event of a shift from one vendor to another, it is accepted practice that the new vendor buys, at a depreciated cost, and with benefit of a curiously tolerant competitive acceptance, the on-location existing equipment from the previous vendor. If, on the other hand, the institution elects to buy and maintain its own refrigeration equipment, a reduction of 10 cents per gallon seems to be the established price concession.

With respect to coffee, which accounts for approximately 2.2 per cent of the food cost dollar, the following are a few precepts that give bearing points of analysis:

1. If your price per pound for an acceptable quality is in the vicinity of or below the next to the lowest grade of one of the large chain stores, you probably have a good price.

2. In a standard urn with a suspended bag for the coffee grounds through which the hot water is poured, the loss in brewed coffee, when the bag is removed, can amount to as much as 12 per cent unless a so-called riser is used. The riser mechanism allows water to drain more completely through the coffee grounds so that a minimum of moisture is removed with the bag and consequently a greater yield of ounces of brewed coffee results. The "riser," which on a specially made basis costs only about \$17 per urn, may provide as much as a 5 to 10 per cent better yield in terms of brewed coffee. For an institution of any size, this increased yield will pay for the cost of the riser in short order and will provide substantial economies per year in terms of poundage purchased. If, for example, the institution spends about \$33,000 a year for coffee, as we do at Harvard, a 10 per cent better yield means a saving of approximately \$3300 per year.

3. The Coffee Brewing Association recommends, for hotels and restaurants, a mix of 2 gallons of water to 1 pound of coffee. This mixture, however, is a calculated strong brew and, for educational institutions, a mixture of 2½ gallons of water per pound or even 14 ounces of a good quality coffee will provide an acceptable mixture.

4. The proponents of instant coffee, which may sell on only a slightly higher basis per cup of coffee served, claim that not only does the instant product avoid the yield loss in terms of bag removal, namely 8 to 12 per cent, but also, on a time-study basis, its ease of mixture in an urn will save up to 75 per cent in labor cost.

I have covered only certain aspects of the food procurement problem, but the categories referred to account for approximately 65 per cent of the food cost dollar and represent particularly those areas where careful procurement and thorough management control of costs are especially needed. ■

**Ideas by the dozen for
the discouraged food director**

Putting Imagination Into the Menu

MARY ANN WARNER

Food Director, Art Institute of Chicago

THREE is a basic injustice in the fact that generally youth has good health and good appetite, but little money, while age has money but failing health and appetite.

In planning items for student menus we concentrate on four requirements: (1) items fabricated from familiar foods and ingredients; (2) portions to satisfy hunger; (3) presentation and service planned to appeal to the eye; (4) foods usually described as those that "stick to the ribs." It would not be safe to underestimate the student's knowledge of good nutrition and interest in food for physical and mental fitness. They are also calorie counters. However, they are not above declaring that something is inedible if they don't like it. The all-encompassing condemnation of a menu is: "It is starchy."

Pastas to the Rescue

This indictment "starchy" is usually the result of the overuse of spaghetti, macaroni and noodles. But, without pastas, I am sunk. The realization that I had been in a rut for a long time came from a brochure distributed by the National Restaurant Association. In this brochure a double page spread pictured and described 31 pasta items. These fascinating little bits and shapes nagged at my imagination furiously. With all of these to choose from, I had been limiting and handicapping menu planning in trying to use only three types in a hundred ways.

There is nothing new to learn. Meat, fish and fowl blend and combine with all these pastas along with the old

familiar sauces. But what a difference in appearance and in acceptance! We use shell macaroni, noodle bows, jumbo shells, egg cappelletti, mafalde, rigatoni, rosetta, rooster's crest, mastachioli, and green noodles as economical extenders. I am working on more shapes and sizes. All are pasta, all substantially the same, but they seem so very different, appear as something new on the menu. The difference in shape makes them seem less starchy.

Through the years the sandwich has replaced soup as a light economical meal. Good soup is easier to make in quantity, easier to serve quickly, and can be made during off-peak time to hold throughout the serving period without deterioration of quality. Soup, including chowders, gumbos and thin stews, is a heartening, satisfying and nutritious meal. It is a staple part of the diet of all countries and nationalities, and each has produced truly great gourmet treats according to the ingredients available to them. Personally, I would like to start a movement "off with the sandwich board and on with the soup pot."

We concentrate on the "meal in a bowl" varieties for our students. Sometimes they are offered with dessert and beverage, at other times with French bread and cheese. We have served soups together with plain uncut fruit from a bowl. A green salad is an acceptable accompaniment. We use beef stock, chicken, lamb, turkey and ham stock as a base and many times just the juices from vegetables for a meatless dish.

These luncheon soups are always filled with such ingredients as red

beans, navy beans, lima beans, pinto beans, alone or in combination with other vegetables. A favorite with our students is Spanish black bean soup. Too, we use green split peas and yellow peas and all the vegetables the market provides along with rice, barley, noodles and drop dumplings. Again, we find those interesting little shapes and forms of pasta give us variety in filling, for there are little bits designed just for soups.

Soup Cookery Rewarding

Many famous soups, such as Philadelphia pepper pot, mulligatawny, minestrone and old-fashioned turkey soup, should be produced according to the original formula. But generally, soup cookery is the most rewarding for a cook or manager with an urge to create, and the problem of leftovers is made easier. Even leftover soup adds up to another soup. Green split pea soup with tomato makes puree mongole; with mashed potatoes, pureed carrots, spinach or what have you, it becomes puree of mixed vegetables. This can be made in your own kitchen or poured from a can. Soup cookery can be fun and profitable, and it can add many low-cost menu items to please and satisfy hearty appetites.

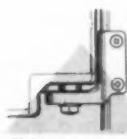
Sandwiches are not easy to handle. We have a large outdoor dining room where many sandwiches are served. We cut them and made them pretty but found that bread exposed to fresh air for only a brief time has a dry texture. We tried one device after another, from a thin plastic wrap to covers, with little improvement. One day, in talking to the Norwegian com-

From a paper presented at the National Food Service Association, Chicago.

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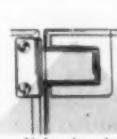
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We are not using this conventional type of sandwich much now. We have gone to the open faced variety. It is easier to make and students like it.

mercial consul, he mentioned that he missed the Danish style knife and fork sandwich. This is an open sandwich with the filling arranged to cover all edges of the bread.

We experimented and found that a worker could make these sandwiches very fast, as fast as a plate can be dished and served at the steam table. She simply places two slices of bread on a plate, butters it with soft butter, and arranges on top of it the prescribed portion of meat or cheese. A leaf of lettuce and a garnish finishes the plate. If the filling is the salad type, a leaf of lettuce is placed on one slice of bread with the dip of salad filling placed in it with garnish on the side.

To test student acceptance we offered a special knife and fork sandwich alongside of the wrapped sandwiches. Although the prepared sandwiches sold for less, the percentage of sales of the open item was greater. Because the filling can be seen, it looks like the portion is larger. It is also more appetizing. We have no leftovers and we can offer a wider variety.

We have increased sales and profits in developing a file of steam table dishes that we call sandwiches. These consist of a light baking powder biscuit dough, rolled into sheets about a quarter of an inch thick to fit a steam table pan. One sheet is placed on the bottom and covered with a half-inch

layer of finely chopped and well mixed seasoned ingredients. This may be ham, beef, chicken, turkey, lamb, veal or seafoods, all leftovers in most instances. Sometimes we use spiced luncheon meat. Over this filling, we place another sheet of the biscuit dough, score it as a pot pie crust, and bake. Care must be taken to place the filling on lightly to prevent it from being a too solid mass and to bake only until done to prevent dryness.

Served From Steam Table

These are placed on the steam table in the pan, cut into squares, and served with a compatible sauce or gravy. With the beef, we may use brown gravy, jardiniere sauce, tomato sauce, or mushroom sauce. The ham may have a cream sauce or a cheese sauce. Chicken and turkey are served up with their natural gravies. This menu item has given us an almost endless variation for using leftovers in a satisfying but economical dish. They have been very well received.

An Italian dish called strata is somewhat similar to our baked sandwiches. This is made by placing trimmed slices of white bread to cover the bottom of a steam table pan, then covering each slice of bread with sliced cheese and topping with another slice of bread. A mixture of raw milk and egg is poured over this and is ab-

sorbed. Then the whole thing is baked to set the custard and to brown. It is a grandchild of French toast! It is served in portions the size of the slice of bread. We vary this with a filling that is good in combination with the egg and milk, such as ham, tongue, turkey and chicken. With a fruit garnish or a salad this can be a satisfying meal.

We teach our salad department to serve for greater profit with a simple demonstration. A cup full of whole large stuffed olives is chopped coarsely and the olives put back into the cup; the difference in volume by measure is noted. Then these same olives are chopped fine and put back into the cup and again the difference in volume by measure is observed.

Chicken, turkey, eggs, ham, salmon, tuna fish, and the like are cut into bite size pieces, pieces that are appetizing, that create the impression of lavish portion service, and provide for a more attractive menu item at less cost to prepare.

Foods that are to be served in cream sauce and gravies are also cut into bite size pieces. The larger pieces hold their shape and texture longer. They appear more appetizing when served. They do not disintegrate into the sauce and disappear. Have you ever been embarrassed to see your steam table server seek for a distinguishable piece toward the end of the serving time? Have you watched for a piece of tuna fish that would identify the serving of sauce filled with the bits of fish? If you have, you will be interested in our little teaching demonstration of measure.

We use the same principle in preparing the ingredients for casserole dishes. Three or four appetizing bite-size pieces in with the macaroni, rice or noodles will hide the trim and scraps much more appealingly. We can learn from the green grocery merchandisers who always arrange the biggest and most perfect fruit and vegetables on the top of the box or basket. One large mushroom cap on top of the steak, two or three whole small mushrooms in the casserole mix seems somehow a more lavish serving than a larger quantity chopped fine in the sauce or gravy.

We have a much greater sale of fried chicken when we serve the whole half of a 1½ pound broiler as compared to a quarter of a 2½ pound fryer. It



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doesn't make sense, but it is the case. The most dedicated people in the food service business are those who serve students three meals a day, seven days a week, month after month. When I hear how mothers cater to and pamper their children's poor eating habits and fussy appetites, I want to say: "Lady, you only just punishment would be to have to operate a college dining room for several hundred duplicates of your child when he goes away to school." When I hear the housewife in the butcher shop say: "What in the world will I give my family tonight? I get so tired of planning meals," I have to fight a strong urge to become violent.

Chances are that the child will want a hamburger and the housewife will buy ground beef. So we are fortunate that the menu items produced from ground beef are limitless. Sometimes maybe it becomes too easy to just settle for ground beef.

We like to use for variety Italian fricatelli, made of ground veal or pork and served with green noodles and grated cheese; pork balls in a pungent sweet and sour sauce served with rice; Swiss meat balls made of ground beef, veal and pork with sauerkraut and potatoes, served with caper sauce. We like ground lamb patties, wrapped with bacon, and broiled or baked. Au gratin potatoes and mint sauce make these a real treat.

Breast of lamb split behind the bones to form a pocket to be filled with a mixture of ground lamb and seasoning is also good. Tied and baked, it carves and serves as a substitute for costly lamb roasts. Small ground lamb balls in curry sauce with rice or with pasta shells in a Madras sauce are especially good.

We grind pork and mix with crumbs and eggs and flatten it out into $\frac{1}{8}$ inch thick sheets in a size to fit into the steam table pan. We fill these sheets and fold to bake as we would baked stuffed pork tenderloin, and serve with the same accompaniments and garnishes. We make little patties of ground veal to be filled with dressing and baked. We proceed as for veal birds and as if we were using the finest sliced veal leg.

The subject is obviously endless. Those in the food service business have so many ways to solve a problem. They become frustrated only when they cease to let their imagination and creative ability have its way with the menu. ■

here's the profitable way to extend food service on growing campuses...

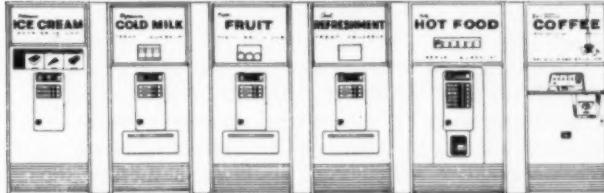


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NEWS

**Convert Standard Parking Space for Small Cars . . . Michigan Adopts By-Law
on Nondiscrimination . . . Five-Year Grant for New Cooperative Program for
Engineer-Scientists . . . Long Island Faculty Gets 10 per Cent Pay Boost**

Hofstra Expands Small Car Parking

HEMPSTEAD, N.Y. — Encouraged by the success of its first parking area for small cars, Hofstra College has added 67 spaces to the original 99 to accommodate a total of 166 small automobiles.

The new area is immediately adjacent to the one created last May by the college parking committee. According to Adm. Paul Foley Jr., Hofstra business manager and parking chairman, the converted spaces have been completely utilized since the day they were opened.

Each small car is allotted 6½ by 14 feet, as compared to the 8 by 20 feet occupied by standard size cars.

The new 67 small car spaces formerly were occupied by 38 standard cars. It is estimated that at least 200 to 300 small cars are brought to the campus during the 8 a.m. to 11 p.m. weekday. Hofstra, a commuters' college, has some 2000 parking spaces.

Stevens Enters Phase 2 of Development Program

HOBOKEN, N.J. — Stevens Institute of Technology started the second phase of its building program in December when workers started taking down Castle Stevens to make way for the \$2 million new Student-Faculty Center. This is the first of three buildings to be erected within the next two years for a total cost of \$4 million.

First step is to remove all contents of the Castle and place them in storage. Objects that have a historical or sentimental value will be relocated in a suitable public area in the new building, according to present plans.

When the two new residence halls are completed, the resident population of the Castle Point campus will be 75 per cent of the undergraduate body.

At present, about 60 per cent of that 1000 man student group live in dormitories or in fraternity houses along Castle Point Terrace.

Michigan Takes Stand on Nondiscrimination

ANN ARBOR, MICH. — Regents of the University of Michigan have adopted a by-law spelling out the university's policy of nondiscrimination.

The action came at a recent monthly meeting of the regents. The text of the by-law is as follows: "The university shall not discriminate against any person because of race, color, religion, creed, national origin, or ancestry. Further, it shall work for the elimination of discrimination: (1) in private organizations recognized by the university, and (2) from nonuniversity sources where students and the employees of the university are involved."

The regents emphasized that the University of Michigan always has practiced a policy of nondiscrimination in the administration and management of its internal affairs. The by-law was adopted to provide a clear-cut and concise statement of these policies.

753 Foreign Students Enrolled at Cornell

ITHACA, N.Y. — India with 93 students ranks first among the foreign countries represented on the Cornell University campus this year, according to figures just released by the university's foreign student office. The traditional leader, Canada, has 90 students compared with 95 last year.

Over-all foreign student enrollment this year climbed to 753, the highest ever. Cornell is now third among U.S. colleges and universities in the percentage of foreign students to total enrollment, according to the Institute of International Education.

10 per Cent Pay Boost for Long Island Faculty

NEW YORK. — Long Island University, Brooklyn, has announced across-the-board increases in faculty salaries.

A new salary schedule approved by the board of trustees will give instructors, assistant professors, and associate professors a 10 per cent increase over the present base salary for each rank next fall and an additional 10 per cent increase the following year. Professors will get a 12½ per cent raise over the present base salary next year and an additional 12½ per cent the following year.

The trustees also approved additional retirement benefits.

The new pay schedule means that the salary of instructors will rise from an average of \$4932 to \$5780, assistant professors from \$6020 to \$7099, associate professors from \$7132 to \$8448, and professors from \$8308 to \$10,290. Professors who are chairmen of departments will continue to receive additional stipends for administrative work.

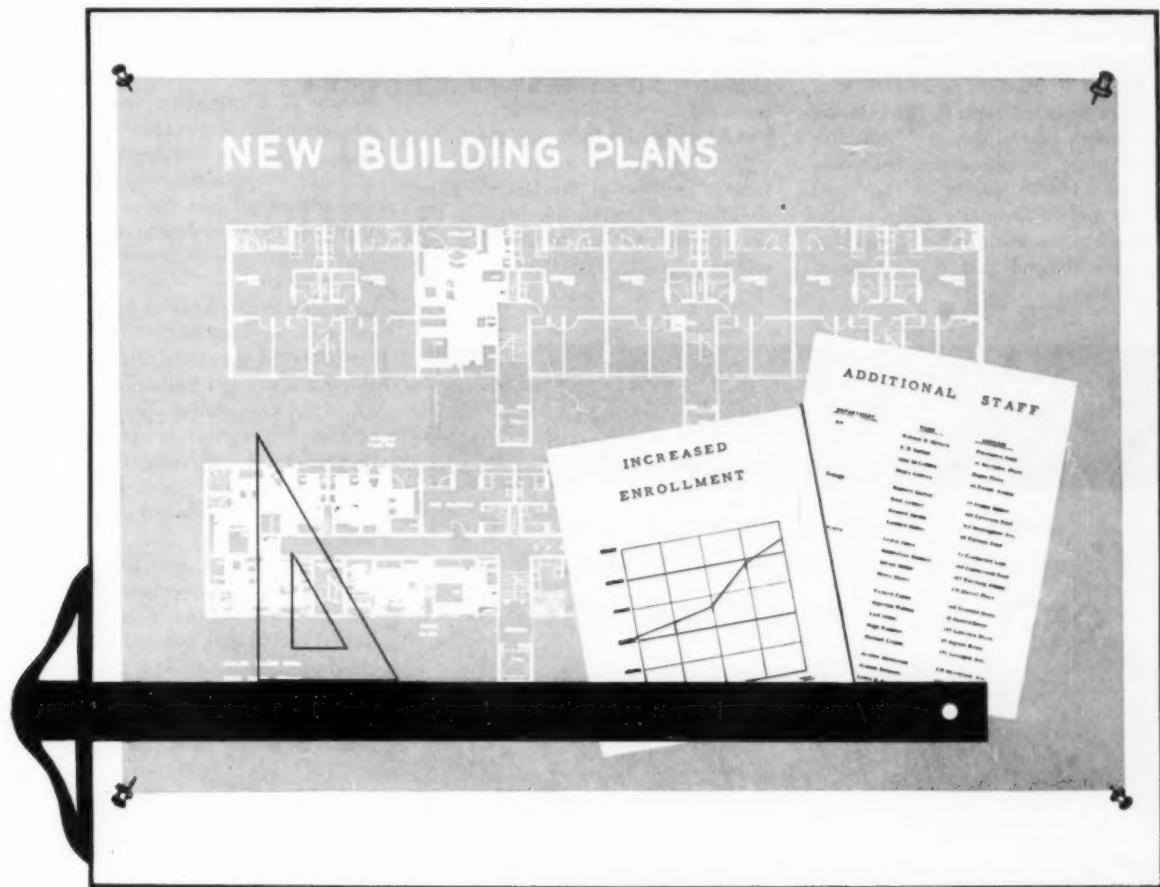
Union Carbide Gives \$50,000 to I.C.F.A.

NEW YORK. — Gifts totaling \$50,000 will be made by the Union Carbide Corporation to 15 state associations of private colleges, it was announced by Dr. Gerald P. Burns, executive director of the Independent College Funds of America.

The Independent College Funds of America serves as a coordinating center and clearinghouse for 40 state and regional associations, representing 477 private colleges throughout the nation.

The Union Carbide Educational Fund will distribute the gifts to the 15 associations prior to March 1. Gifts have been made to the states and regions where Union Carbide has major operations.

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Milk and Ice Cream Popular at Penn State

UNIVERSITY PARK, Pa. — Milk and ice cream are popular with Pennsylvania State University students eating in campus dining halls.

Robert C. Proffitt, director of food service, reported recently that during the month of October the 6620 students using campus dining halls consumed 146,639 quarts of milk and cream and 2693 quarts of ice cream.

A study made during one week in October showed that 6.4 quarts of

fluid milk were furnished for each student. This average varied from 8.8 quarts in an all-men's dining unit to 5.8 quarts in an all-women's dining hall. Additional quantities of milk used in cooking and baking add 1.9 quarts per student, which brings the total average to 8.3 quarts per student per week.

Addling to the foregoing totals the milk and ice cream served in the restaurant facilities of the Hetzel Union Building, the total consumption on the campus in October totaled 161,146 quarts of milk; 7281 quarts of ice

cream, and 2320 quarts of ice cream mix used in soft ice cream.

Cooperative Program for Engineer-Scientists Given Ford Support

CINCINNATI. — Support for the University of Cincinnati's new cooperative program of graduate study and basic research in engineering and the physical sciences through a \$200,000 five-year grant has been announced by the Ford Foundation. The university's program is believed to be the first of its kind.

With a background of 53 years' experience in cooperative engineering education at the undergraduate level, the university last fall inaugurated its graduate cooperative program with the support of some of the largest industries in the Cincinnati area. The Ford Foundation grant will aid in financing the program during its development phase.

The university's new program not only will provide a doctoral education for industrial engineer-scientists required by industry but will give trainees the advantage of actual experience in basic research in industrial laboratories not available in the traditional, noncooperative form of graduate study.

By 1964 the university program is expected to be self-supporting with an enrollment of about 100 industry supported research fellows.

Hans Ernst, for 32 years director of research with the Cincinnati Milling Machine Company, planned and now heads the new program.

Meet To Advance National Honor System

HOBOKEN, N.J. — Undergraduates from seven colleges, believing honesty in college students is not a thing of the past, met at Stevens Institute of Technology on December 5 to propose a federation of college honor systems throughout the country.

Attending the all-day sessions were representatives from the U.S. Military Academy (West Point), the U.S. Naval Academy (Annapolis), the U.S. Merchant Marine Academy (Kings Point), Princeton University, the University of Virginia, Webb Institute of Naval Architecture, and Stevens.

They worked out the mechanics of setting up an advisory organization both for colleges that conduct examinations without professors present and

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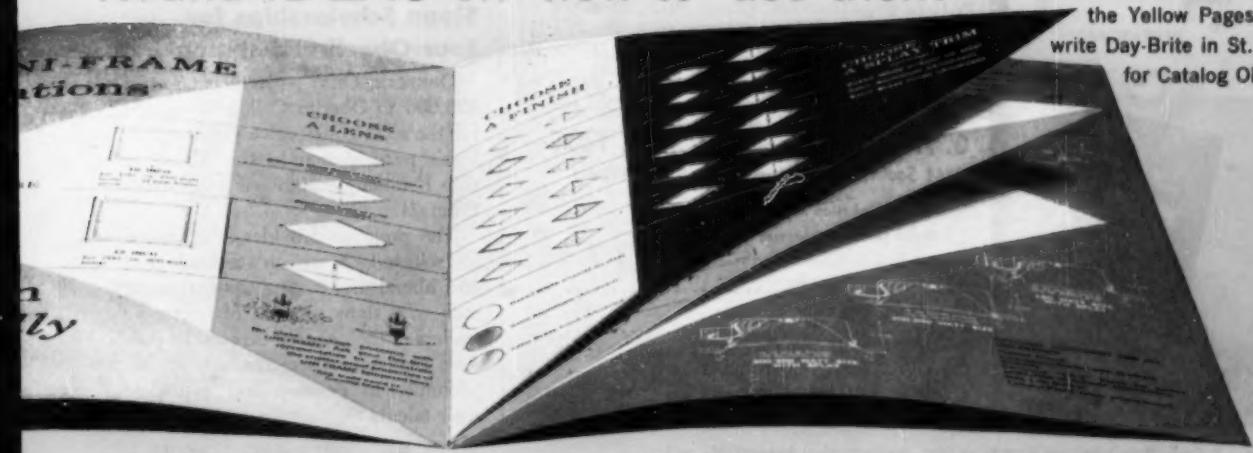
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colleges interested in setting up such honor systems.

The meeting was sponsored by Gear and Triangle, an honorary society at Stevens which fosters the honor system and cites undergraduates for distinguished participation in college affairs.

Stevens' honor system was founded in 1908. Each student is on his honor during classroom and laboratory examinations, pledging that he has received no help. The undergraduate honor board explains the system to new students and faculty and deals with infrequent offenders.

United Negro College Fund Awarded \$50,000

NEW YORK. — The United Negro College Fund has received a \$50,000 grant from the Esso Education Foundation for the 1959-60 academic year.

This is one of the largest grants of 363 made by the Foundation to educational organizations and privately supported colleges and universities. They totaled \$1,466,500.

Contributions to the United Negro College Fund help meet the operating expenses of 33 private member colleges and universities in 12 states. Last year, Fund volunteers raised \$1,840,000 through campaigns in 124 cities.

The Esso Education Foundation, now five years old, is supported by Standard Oil Company (N.J.) and eight domestic affiliates — Esso Standard, Carter, Oklahoma Oil Company, Pate Oil Company, Esso Research, Esso Export, Esso Tankers, and Interstate Oil Pipe Line Company.

This year's 363 grants raise to nearly \$7.5 million the total aid to education by the Foundation since it was established.

Sloan Scholarships for Four Oberlin Freshmen

oberlin, ohio. — A recent gift of \$28,000 to Oberlin College continues for the sixth consecutive year the college's participation in the Alfred P. Sloan Foundation National Scholarship Program.

The program provides scholarships at selected American technological and liberal arts institutions for young men who show promise of becoming leaders in their chosen careers. Its purpose is to give these students an opportunity to develop and capitalize their talents.

University of Chicago Sets New Record for Operating Expenditures

CHICAGO. — Expenditures to operate the University of Chicago in the last fiscal year again have set a new record.

John I. Kirkpatrick, vice chancellor for administration of the university, reported that operational expenditures for the fiscal year ended June 30, 1959, totaled \$103,509,985.

Current income for the same period totaled \$103,771,777. All of the unspent amount is committed for future expenditures, the annual report of the university controller, Donald L. Cartland, shows.

Included in the figures are \$52,698,-694 of income and expenditures for the operation by the university of the Argonne National Laboratory, Lemont, Ill., and three other special contract projects for the federal government. The other special governmental projects are the Chicago Midway Laboratories, the Institute for Air Weapons Research, and the air force's Systems Research Laboratory.

Vice Chancellor Kirkpatrick pointed out that it was the first time that the University of Chicago's consolidated expenditures in a fiscal year had been more than \$100 million.

Asks Permit for FM Radio Station

CINCINNATI. — The University of Cincinnati has applied to the Federal Communications Commission for a permit to construct a frequency modulation educational broadcasting facility, President Walter C. Langsam has announced.

Following approval of the construction permit, the university will then apply to the F.C.C. for a license to operate an FM radio station.

About 70 per cent of the broadcast time will be devoted to good music, Dr. Langsam says. When in full operation, the station will be on the air a maximum of 15½ hours a day, seven days a week.

The university anticipates that funds for the project will be derived from private gifts.

Changes Name

AUBURN, ALA. — On January 1, the name of Alabama Polytechnic Institute was officially changed to Auburn University.

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\$200,000 Scholarship Grant to Queens College

CHARLOTTE, N. C. — An initial scholarship grant of \$200,000, over a period of five years, has been made to Queens College by Charles A. Dana of New York, chairman of the board of the Dana Corporation and administrative head of four other major business concerns.

The grant will provide \$40,000 each year for students in the sophomore, junior and senior classes. Approximately 15 students will be se-

lected during the second semester of their freshman year and designated as Dana Scholars. The amount of the cash award will vary from \$100 to \$1000.

All scholarship recipients at Queens, a liberal arts college for women, are required to render a minimum amount of service to the college as assistants in various departments of the college. The amount of work required varies from four hours to 12 hours a week. This program is based on the conviction that there is educational value in a student's working for a portion of the

aid received. In the case of Dana Scholars, the work grant will be in addition to the scholarship.

Mr. Dana calls the grant to Queens a "trial program." If the program is as successful as he and the college officers anticipate it may be continued indefinitely.

Mr. Dana previously made a grant of \$360,000 to Queens College for the erection of a classroom building. It will be completed for use next year.

Western Reserve To Increase Tuition

CLEVELAND. — Western Reserve University will increase tuition to \$32 per semester credit hour in September 1960 and to \$35 in September 1962. This will affect Adelbert College, Flora Stone Mather College, Cleveland College, the graduate school, the school of business, and the school of nursing (graduate division).

In the schools of law, library science, and the school of applied social sciences, the tuition of full-time students will be \$960 on an annual basis in 1960-61, and \$1050 in 1962-63.

Tuition in the school of medicine will be increased from \$1000 to \$1100 per year in 1960, and to \$1200 two years later, and tuition in the school of dentistry from \$900 to \$1000 in 1960, and to \$1100 in 1962.

In the school of nursing, tuition in the first five sessions of the basic program will increase in 1960 from \$200 to \$225 and in the final session and summer session from \$75 to \$90. In the school of law there also will be an increase of \$4 per credit hour for part-time students, from \$35 to \$39.

President John S. Millis said the raised tuition would make possible further increases in faculty salaries. The estimated tuition increase might change the percentage accounted for by student payments of the total education cost from 45 per cent in 1959-60 to 47 per cent in 1960-61.

Lehigh Seniors Seek To Raise \$175,000

BETHLEHEM, PA. — Lehigh University seniors on December 5 started their campaign to raise \$175,000 for the university through class insurance.

The plan calls for each senior to take out a 20 year endowment life insurance policy for \$300 at an annual rate of \$14. The fund is to be turned over to the university at the twentieth re-



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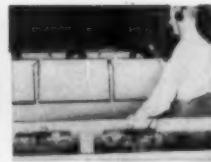
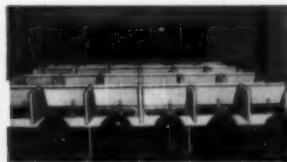
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union of the class for a project to be determined by a vote of the class in 1980.

Lehigh's last 11 graduating classes have subscribed \$1,100,000 under the class insurance plan in the last 10 years.

The policy is a combined life insurance and endowment policy. In the event of nonpayment of premiums, a class fund will be used as long as it lasts to make such payment in order to keep all policies in force.

In the event of the death of the insured at any time during the 20 years, the \$300 value of the policy is paid

at once, and such proceeds are held in a special fund by the university for inclusion in the memorial gift in 1980.

Land Grant Colleges To Observe Centennial

WASHINGTON, D.C. — Plans for the centennial commemoration of its member colleges in 1961-62 were announced by the American Association of Land Grant Colleges and State Universities at its annual meeting in St. Louis.

An international convocation on higher education to be held in Kansas

City, Nov. 12 to 16, 1961, will keynote the centennial commemoration of the U.S. system of land grant institutions, according to plans.

Prominent educators from other nations also will attend. Plans call for major addresses by the President of the United States and the secretary general of the United Nations. The Kansas City program will highlight centennial events to be carried out through the 1961-62 academic year. Specific founding date of the act establishing the land grant system, signed by President Lincoln, was July 2, 1862.

Heading the centennial commemoration plans will be Chancellor Clifford M. Hardin, University of Nebraska, chairman of the centennial steering committee.

Land grant institutions enroll about 20 per cent of America's college population, grant 40 per cent of the doctorates in all subjects, confer about one-half of the doctorates in the sciences, engineering and health professions, all of those in agriculture, and about one-fourth of the total in arts, languages, business, commerce and education.

87 per Cent of Illinois' Students From Home State

URBANA, ILL. — Illinois is the home state of 87 per cent of students registered this year in the University of Illinois, C. W. Sanford, dean of admissions and records, reported recently. The remaining 13 per cent come from all other states except Alaska, and from 78 foreign countries. Also represented are the District of Columbia, Canal Zone, Puerto Rico, and Virgin Islands.

Illinois residents in the university's all-time record enrollment come from every one of the state's 102 counties. The largest number of foreign students is 161 from Colombia.

Oberlin Withdraws From U.S. Loan Program

OBERLIN, OHIO. — Oberlin College last month announced complete withdrawal from participation in the student loan program under the National Defense Education Act of 1958, so long as an objectionable "disclaimer affidavit" is required of student applicants for federal funds.

The board of trustees, meeting recently, supported earlier faculty and

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A classroom scene showing students watching a television screen displaying a man speaking.

student body objections to the affidavit requirement by voting to return to the government two uncashed loan fund checks totaling \$68,146, allotted to Oberlin but "frozen" here pending possible congressional revision of the National Defense Education Act. When a bill introduced in the Senate for this purpose failed to come to a vote, Oberlin's trustees decided to return the money already received and to withdraw completely from further participation under existing terms.

Million Dollars in Aid to Lehigh Students

BETHLEHEM, PA. — Financial aid to 808 students totaling \$1,033,478 for the current academic year at Lehigh University was announced recently.

J. Douglas Leith, dean of students and chairman of the university's committee on scholarships and loans, reported that a total of \$466,046 has been granted in financial assistance to 505 students in the three undergraduate colleges. The awards have been made to 19 per cent of the student body.

In the graduate school, of which Dr. Wray H. Congdon is dean, \$568,890 has been allocated to 303 advanced students working for master's and doctorate degrees.

In addition, 178 undergraduates received awards from their hometown organizations and their fathers' employers. These nonuniversity controlled awards total \$98,542.

Regents Approve Revised Capital Outlay Program

ANN ARBOR, MICH. — A revised five-year capital outlay program has been approved by the regents of the University of Michigan.

The regents had given approval to a preliminary program last June. The changes made recently took note of the expected capital outlay appropriations for 1959-60, which are still awaiting legislative approval. Act 116 of the Public Acts of 1953 requires each agency of the state government to submit a schedule of building needs for the succeeding five years.

The revised figure for educational facilities for the 1960-61 year is now \$16,710,000 with the change made necessary because of a request for \$1,900,000 for an institute of science and technology building on the North Campus. An appropriation for this building was included in Senate Bill

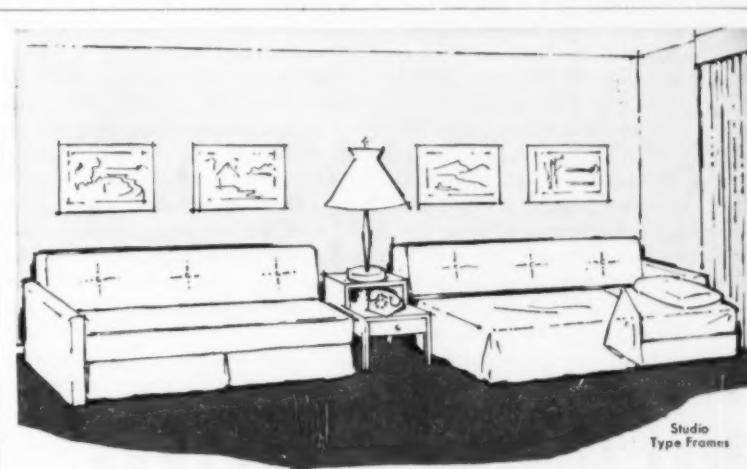
112 during the current session, but was deleted before final passage. No change has been made in the priority of projects, with the school of music building on North Campus remaining No. 1 on the list.

The other requests for 1960-61 remain the same, with \$400,000 requested for special maintenance and \$477,000 for remodeling and additions to educational facilities. For the medical center, \$1,517,000 is requested for new construction and \$1,600,974 for remodeling.

Requests for facilities for the five-year period total \$125,725,000. For hospital and research facilities for the medical center an additional five-year total is \$23,470,974; this also includes remodeling and additions.

Asks State To Increase Budget by \$4 Million

NEW BRUNSWICK, N. J. — Improved faculty salaries are urgently needed at New Jersey's state university and the public colleges if they are going to



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attract capable teaching staffs in the highly competitive era ahead, Dr. Mason W. Gross, president of Rutgers University, declared last month.

Dr. Gross emphasized the need for upgrading faculty salaries as he presented the university's proposed budget for 1960-61 before State Budget Director Abram M. Vermeulen at a hearing on the Douglass campus.

The university is asking the state to increase its operating budget for the next fiscal year by \$3,981,024 to bring the total from the state to \$17,131,910, or slightly less than half of the total university budget of \$34,687,079.

A major item in the budget increase is \$621,800 requested to make it possible to put into effect the first half of a two-stage upgrading of faculty salaries. This plan has already had the approval of the Rutgers board of governors, the state board of education, the civil service commission, and the college salary committee of New Jersey's state university and colleges.

If the funds are made available, all faculty salaries in the public colleges would be upgraded. As an example, the 10 month salary of an instructor now being paid between \$4750 and

\$6178, depending on his years of service, would be increased to between \$5237 and \$6808 in the first stage and to between \$6063 and \$7881 in the second stage.

Dr. Gross said: "I cannot emphasize too strongly my feeling about more adequate salaries for the teachers in our public colleges. They are inadequate and they are unfair."

"Unless we can improve our faculty salary scale, we will be able neither to hold some of the very good people we now have nor to attract to our colleges the qualified and able people we need to provide a high quality of education. Any other kind is a waste of the taxpayers' money."

Dr. Gross also made a plea for "more funds for supplies, for equipment, for housekeeping, and for the maintenance of our physical plant."

Dr. Gross also singled out a request for a \$60,000 increase in the appropriation for mosquito research. Research carried on at Rutgers has produced the knowledge that has virtually wiped out malaria in New Jersey and has produced the control methods that have made possible the development of vast areas of the Jersey seashore.

NAMES IN THE NEWS

Dr. William Graham Cole, Cluett professor of religion and chairman of the department, and dean of freshmen at Williams College, Williams-



William G. Cole

town, Mass., has been named president of Lake Forest College, Lake Forest, Ill. His appointment becomes effective September 1. John R. Howard, vice president for business and finance, has been serving as acting president since the death of Ernest A. Johnson last April. Mr. Howard will serve in that capacity in the interim.



L. L. Browne

ment as consultant for the university following a five-month hospital stay.

L. L. Browne, superintendent emeritus of buildings and grounds at the University of Arkansas, Fayetteville, has just returned to his special assign-

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Dr. Herbert E. Longenecker, vice president of professional colleges of the University of Illinois at its Chicago campus, resigned December 17 to accept appointment as president of Tulane University, New Orleans. He will assume his new duties September 1, when he will succeed Rufus C. Harris, who is retiring after 22 years to become president of his alma mater, Mercer University, Macon, Ga. Dr. Longenecker had been dean of the graduate school of the University of Pittsburgh before going to Illinois.



C. H. Raullerson

recent announcement by W. J. Trent Jr., executive director. Mr. Raullerson joined the Fund staff in 1952. He was formerly instructor in political science at Lincoln University and at Brooklyn College.

Dr. B. Joseph Martin, formerly president of Wesleyan College, Macon, Ga., assumed office on January 1 as president of Taylor University, Upland, Ind. He succeeded Dr. Evan H. Bergwall, who resigned last spring after eight years as the administrative head of the university in order to return to the pastoral ministry in Fort Wayne, Ind.

Gordon L. Starr, director of student unions at the University of Minnesota, Minneapolis, has been appointed director of research and education for the National Industrial Recreation Association, Chicago. Mr. Starr will continue as director of student unions while serving the one-year appointment with the N.I.R.A.



Gordon L. Starr

John A. Howard was recently appointed president of Rockford College, Rockford, Ill., by the board of trustees and will assume his new duties on February 1. He succeeds Dr. Leland H. Carlson, who left last

September for a research post at Claremont College in California.

James W. Bryant, business manager of Hampton Institute, Hampton, Va., was recently elected a member of the Dixie Hospital board of trustees for a term of three years. He is a former member of the editorial advisory board of COLLEGE AND UNIVERSITY BUSINESS.



James W. Bryant

Dr. William R. Davies, who had planned to retire January 1 as president of Wisconsin State College, Eau Claire, died December 10 following a hip injury he suffered in a fall. He had been president of the college since 1941.

Dr. H. Clifford Fox, president of Findlay College, Findlay, Ohio, for 12 years prior to his retirement last February, was killed in an automobile accident November 24. Dr. Fox had been living in Beulah, Mich., since he left Findlay College less than a year ago.

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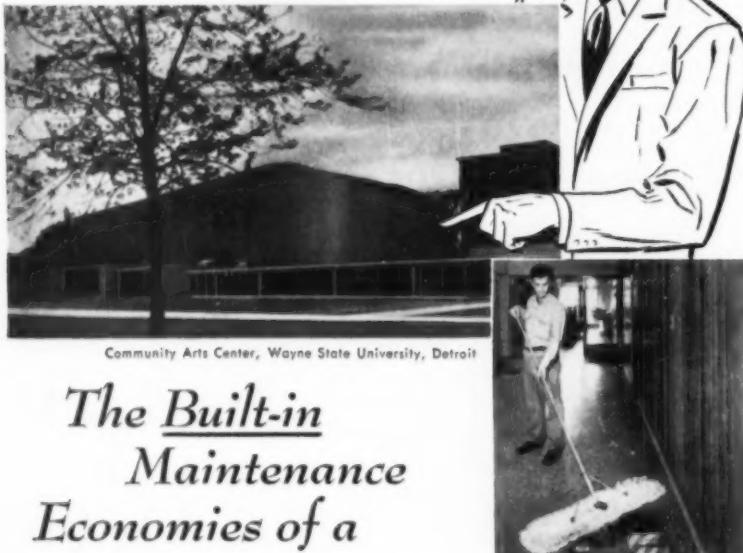
National Federation Consulting Service, 343 S. Dearborn St., Chicago. George E. Van Dyke, executive director.

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President: George J. Cooke, Princeton University; executive director: Ernest T. Stewart, 1785 Massachusetts Ave., N.W., Washington 6, D.C.

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Canadian Association of University Business Officers

President: J. A. Wheeler, bursar, Mount Allison University; secretary-treasurer: D. S. Claringbold, treasurer, Hart House, University of Toronto.

College and University Personnel Association

President: Orie Myers, Emory University; executive secretary: Donald E. Dickason, University of Illinois, Permanent headquarters, 809 S. Wright St., Champaign, Ill.

Convention: Aug. 7-10, Carnegie Institute of Technology, Pittsburgh.

National Association of Physical Plant Administrators of Universities and Colleges

President: R. F. Gingrich, Kansas State University; secretary-treasurer: John H. Sweitzer, Earlham College, Richmond, Ind.

Convention: May 8-11, Statler Hotel, Boston.

Association of College and University Housing Officers

President: Joseph P. Nye, Columbia University; secretary-treasurer: A. Thornton Edwards, Kansas State University.

Convention: July 31-Aug. 3, Indiana University, Bloomington.

Association of College Unions

President: Chester A. Berry, University of Rhode Island; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

Convention: April 24-27, Indiana University, Bloomington.

National Association of College Stores

President: Sam Hanna, DePauw Bookstore, Greencastle, Ind.; general manager: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio.

Associations of College and University Business Officers

American Association

President: Paul G. King, Tennessee A. & I., Nashville; secretary-treasurer, Sinclair V. Jeter, Clark College, Atlanta, Ga.

Central Association

President: Harlan Kirk, Lawrence College, Appleton, Wis.; secretary-treasurer, James J. Ritterskamp Jr., Washington University, St. Louis.

Eastern Association

President: Vincent Shea, University of Virginia; secretary-treasurer: Kurt M. Hertzfeld, Boston University.

Convention: Dec. 4-6, White Sulphur Springs, Va.

Southern Association

President: Clarence Scheps, Tulane University; secretary: C. O. Emmerich, Emory University.

Convention: April 3-5, Edgewater Gulf Hotel, Edgewater Park, Miss.

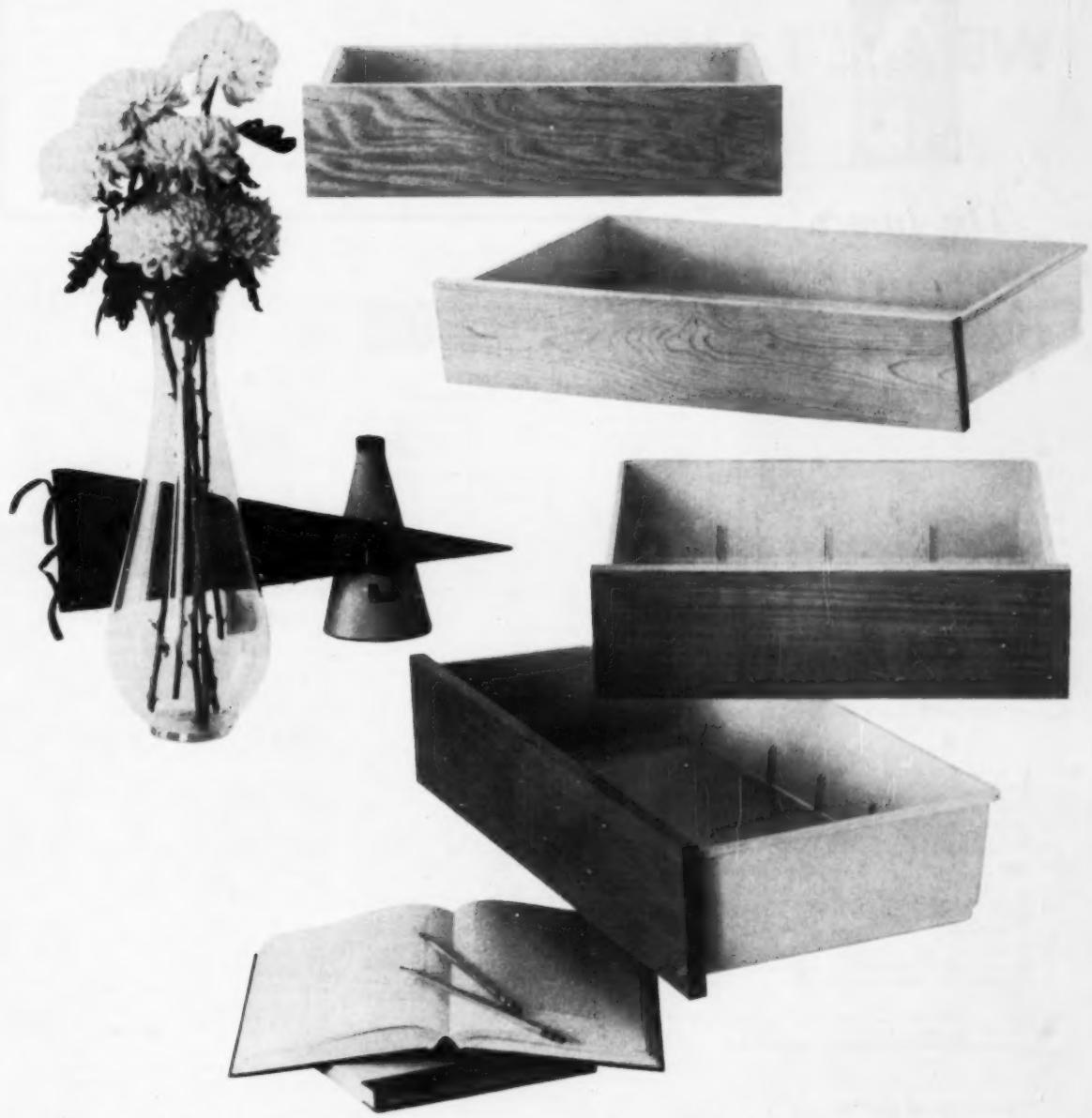
Western Association

President: Ernest Conrad, University of Washington; secretary: James Brainerd, Menlo College.

Convention: May 1-4, Salt Lake City.

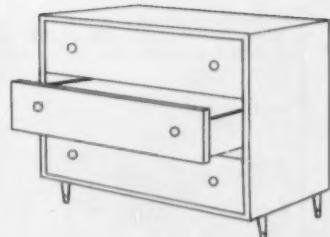
American College Public Relations Association

President: Marvin G. Osborn Jr., Washington University, St. Louis; executive director: Frank L. Ashmore, 1785 Massachusetts Ave., Washington, D.C.



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contract lines featuring
interchangeable ...

MOLDED DRAWERS



Dimensionally stable and uniform, molded drawers can be readily switched on "moving days", easily replaced in built-ins. They never stick, swell, warp, or splinter. Rounded corners make cleaning easy—no need for paper liners. One-piece construction means no seams or faulty joints. The smooth tough finish is scratch resistant. The molded-in color can't fade or chip away. Molded drawers are strong and durable, yet pounds lighter than old style drawers. Partitioning can be customized, fronts of matching wood or plastic surfaced. Monsanto—as a plastics supplier to drawer molders—can direct you to furniture manufacturers now featuring molded drawers in their new contract lines. Write to Monsanto Chemical Company, Plastics Division, Springfield 2, Massachusetts.





The Insured TUITION PAYMENT PLAN

This is the prepayment plan that brings the parent low-cost life and disability insurance protection, plus a monthly budget provision that extends to the final month of his educational expenses four or more years hence. Used today in many of the best-known colleges and preparatory schools, it has proven most valuable to administrative officers by providing them with a dignified, parent-approved method which:

- 1** alerts parents to their financial obligation when the student is accepted for admission;
- 2** offers parents a convenient and logical plan for meeting that obligation;
- 3** assures the parent (and thus the college) that he will have adequate funds with which to meet his college obligations in full and on time;
- 4** preserves the traditional relationship between the college and the parent—debt-free and direct.

Individualized descriptive literature for mailing to the parents of incoming students is furnished for each preparatory school, college or university.

WRITE TODAY FOR DETAILS

We should like to know more about the Insured Tuition Payment Plan as it would apply to the students at:

Name of School
or College _____

Address _____
Please contact:

Name _____

Title _____

INSURED TUITION PAYMENT PLAN

RICHARD C. KNIGHT
112 WATER STREET
BOSTON 9, MASSACHUSETTS

classified advertising

TERMS: 30¢ a word—minimum charge of \$6.00 regardless of discounts. For "key" number replies add five words. Ten per cent discount for two or more insertions (after the first insertion) without changes of copy. Forms close 8th of month. COLLEGE AND UNIVERSITY BUSINESS, 919 N. Michigan Ave., Chicago 11, Ill.

POSITIONS WANTED

Assistant Business Manager — Southeast area; experienced all phases of college business management; strong in supervision of auxiliary enterprises. Write to Box CW 496, COLLEGE AND UNIVERSITY BUSINESS.

Business Manager-Purchasing Agent — Presently business manager of university with approximately 2200 enrollment; age 30, married, 3 children; experienced in procurement, maintenance, new construction, auxiliary enterprises, and business affairs. Write to Box CW 497, COLLEGE AND UNIVERSITY BUSINESS.

Buyer or Assistant Purchasing Agent — Formerly purchasing agent for midwestern branch of National AAA-I firm and presently assistant secretary and sales manager for same; desire eastern or western location; family: B.A.; age 38. Write to Box CW-499, COLLEGE AND UNIVERSITY BUSINESS.

Financial Administration — College graduate with B.S. in Accounting plus four years of experience in public and industrial accounting on administrative level desires employment in the field of college or university financial administration; military obligation satisfied; please reply to DALE E. GARDNER, Springfield, Sykesville, Maryland.

Food Service Director — Ten years college feeding; would like to relocate; thoroughly experienced; available immediately; best of references. Write to Box CW-498, COLLEGE AND UNIVERSITY BUSINESS.

Food Service Director — Varied experience in large volume student union, implant catering and commercial food services; degree in Institutional Management; capable of planning, developing and profitably operating new installations. Write to Box CW 494, COLLEGE AND UNIVERSITY BUSINESS.

Food Service Personnel — Immediate openings for managers, manager trainees, chef managers, chefs, young qualified male graduates who enjoy campus environment; best salaries, benefits; promotional opportunities in leading college food service organization; send personal data to SAGA FOOD SERVICE, 174 West College Street, Oberlin, Ohio.

Physical Plant, Construction or Business Management — Eleven years head of physical plant organizations to 700 employees, plant values over \$60 million; experienced in per-

sonnel, financial, procurement, transportation, housing, maintenance and construction management and contract administration; plus planning, engineering, utilities power plant background; M.S. in Engineering postgrad course in management, registered professional engineer; now employed can be available July; prefer southwest, west or south. Write Box CW 500, COLLEGE AND UNIVERSITY BUSINESS.

POSITIONS OPEN

Bookstore Manager — For large eastern university in metropolitan area; familiar with text, trade, and paperback books, stationery, jewelry, novelties, etc.; experienced in merchandising, inventory control, and supervision of employees; responsible for efficient operation and expansion of self-service bookstore; salary open. Send resume to Box CO 328, COLLEGE AND UNIVERSITY BUSINESS.

Budget Officer — Up to \$12,000; a large municipal organization is seeking a man with business or financial experience in school or municipal operations; must know budget preparation and statistical procedures; midwest location. Write to Box CO 335, COLLEGE AND UNIVERSITY BUSINESS.

Food Service Director — Man or Woman to assume management of complete feeding program for 550 students; pleasant midwest location; substantial experience required; salary open, excellent potential; please state experience, references, salary required, date available in first letter. Write to Box CO 329, COLLEGE AND UNIVERSITY BUSINESS.

Food Service Director — Small middle Atlantic state college; small town; new building and equipment; now serving 400 students three meals daily; salary commensurate with training and experience; responsibility for entire operation; start work at once; retirement system, social security, holidays, and vacation. Write to Box CO-334, COLLEGE AND UNIVERSITY BUSINESS.

Food Service Directors — Excellent opportunities are available for young men and women with food service experience; a leading food service caterer needs managers immediately for: colleges and schools; salary open; relocate. Send resume to Box CO 285, COLLEGE AND UNIVERSITY BUSINESS.

COLLEGE AND UNIVERSITY BUSINESS

919 N. Michigan Avenue, Chicago 11, Ill.

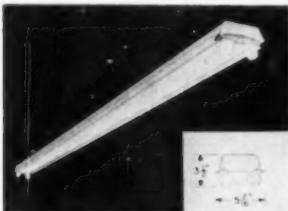
Edited by Bessie Covert

WHAT'S NEW

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card on page 79. Circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Lite-Way Strip Units for Economical Lighting

Quality and low price are features of the new Lite-Way two-lamp Strip Unit lighting fixtures introduced by Day-Brite. Available for four-foot Rapid-Start, eight-



foot tandem Rapid-Start and eight-foot slimline lamps, the fixture can be transformed into a finished, shielded unit by the addition of Day-Brite Fairview enclosures. Designed for surface or suspension mounting, Lite-Way has four or eight-foot rigidized chassis, CBM ballast and is fused to give safe overload protection. **Day-Brite Lighting, Inc., 6260 N. Broadway, St. Louis 15, Mo.**

For more details circle #265 on mailing card.

Titan Heating Unit With Wet Back Construction

Compact size with excellent thermal qualities are features of the new Titan 3-pass unit for heat and power. The highly dependable, conservative unit, with complete wet back construction arranged so that hot gases are in constant contact with water cooled steel walls, is constructed for years of trouble-free service with minimum maintenance. **Titusville Iron Works Div., Struthers Wells Corp., Titusville, Pa.**

For more details circle #266 on mailing card.

"Roll-Book-Stand" Has Slanted Shelves

Readily mobile for display or distribution of books in libraries, classrooms and other areas, the new "roll-Book-stand" has



three slanted shelves providing six and one-half feet of space. Constructed of steel tubing with steel shelves, the stand is braced for strength and rigidity and rolls on

three-inch soft rubber ball bearing swivel casters for ease of handling and quiet movement. **Garrett Tubular Products, Inc., P.O. Box 237, Garrett, Ind.**

For more details circle #267 on mailing card.

Gymnasium Equipment Has Improved Features

Porter parallel bars for gymnasiums are now offered with fiberglass handrails which will not break or splinter. They are available as optional equipment, or can be purchased separately to replace conventional hickory rails on Porter Model 74 parallel bars. An exclusive construction technique gives the new handrails the same feel as wood as well as uniform bounce. Other new features of the bar include rubber feet for floor protection and a new design permitting the equipment to be raised on its casters for easy rolling over door jams and other obstructions. **Porter Athletic Equipment Co., Schiller Park, Ill.**

For more details circle #268 on mailing card.

Automatic Flaked Icemaker Features Low-Cost Operation



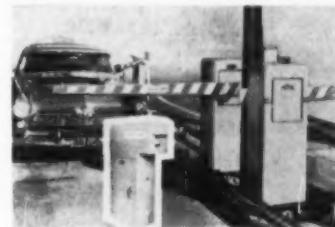
Low-cost operation is a feature of the new Bastian-Blessing automatic electric flaked icemaker. It will produce approximately 250 to 350 pounds of flaked ice per day at minimum cost, dropping it into a connecting insulated bin. The icemaker comes complete with storage bin, compressor and motor in a three-foot unit, with stainless steel facings, work top and backsplash. **The Bastian-Blessing Co., 4203 W. Peterson Ave., Chicago 46.**

For more details circle #269 on mailing card.

Automatic Parking Device Has Time-Dated Ticket Dispenser

With the new automatic parking system recently introduced by the Parcoa Division of Johnson Fare Box Company a driver receives a ticket automatically at the time the gate is raised for him to enter. The self-service, Time-dated Ticket Dispenser permits flexible operation for use in universi-

sities, hospitals and other institutional parking lots. The ticket shows exact time of entry, date and lot location. When the driver leaves the lot, the cashier at the exit records expired time and collects the fee without chance of error. Time is saved



and efficiency increased. **Parcoa Div., Johnson Fare Box Co., 4610 N. Ravenswood Ave., Chicago 40.**

For more details circle #270 on mailing card.

Automatic Accounting Machines Speed Bookkeeping Operations

Ten models of a complete new line of automatic accounting machines are now on the market. Designed to improve all bookkeeping operations, the new machines have a unique "program panel" which controls the automatic functions, directing the performance of up to 35,000 operations without assistance. The machines with the new "dual printer" print two records simultaneously, increasing operating speed. The machines introduce a completely new and simplified accounting method. **Burroughs Corporation, Detroit 32, Michigan.**

For more details circle #271 on mailing card.

Tablet Arm Chair Folds Compactly for Storage

The new Krueger Folding Tablet Arm Chair is designed for comfort and service. The tubular steel frame is electronically seam-welded with extra frame strengtheners at pivot points. The tablet arm of seven-ply hardwood is finished in birch, maple or plastic laminate facing and raises or



lowers automatically as the chair is opened or closed. **Krueger Metal Products Co., Green Bay, Wis.**

For more details circle #272 on mailing card.

(Continued on page 70)

Convera-Bunk Bed

Serves Two Purposes

Designed to be used either as twin dormitory beds or as stacking bunks, the new Harvard Convera-Bunk Bed is quickly con-



verted. Two Spiro Spring Bed Bases are stacked and side-supported by tubular struts for maximum stability. For conversion, the side struts are easily removed and replaced with formed legs which prevent the beds from touching and marring walls. Developed for college dormitories, the bunk or twin beds have pillow rests, guard rails and ladder as optional extras. **The Harvard Mfg. Co., 7619 Grand Ave., Cleveland 4, Ohio.**

For more details circle #273 on mailing card.

Movable Interior Partitions

Have Single Modular Framing

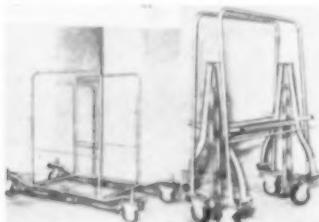
A single modular framing system to which can be attached a variety of paneling forms the core of the new Penn Metal Movable Interior Partition system. Although designed for permanence, the partitions can be dismantled and relocated without damage to any of the parts. Paneling includes steel with baked-enamel finishes in a variety of colors, hardwood panels, unpainted plywood, and gypsum wallboard. The Permalock stud, which has an attachment groove into which the vertical edges of the panels are snapped, is the principal unit of the partition framing. **Penn Metal Co., Inc., 40 Central St., Boston 9, Mass.**

For more details circle #274 on mailing card.

Sico Folding Caddy

Simplifies Table Handling

Folded tables and stage platforms can be easily transported to and from storage on the new Model 2900 folding table caddy. Designed to accommodate 10 to 12 tables of any shape, including round, the caddy is easily handled by one man. It is sized to pass through doors and onto elevators when filled, and folds for storage in minimum space. A non-slip non-marking material ensures positive cradling of the



load and a directional locking caster prevents the caddy from moving during loading. **Sico Mfg. Co., Inc., 5215 Eden Ave. S., Minneapolis 24, Minn.**

For more details circle #275 on mailing card.

Heavy Duty Hardware for Room Dividers and other Doors

Designed for use in the installation of room dividers, folding doors and other accordian type partitions or doors, the new line of heavy duty McKinney hardware is strong and versatile. Doors may be edge hung to collect at either end of the track, or at both ends. They may also be center hung and collected at either or both ends. **McKinney Mfg. Co., 1715 Liverpool St., Pittsburgh 33, Pa.**

For more details circle #276 on mailing card.

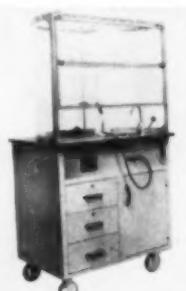
Sterilizer-Washer Sanitizes Urns, Cans and Drums

Coffee and other beverage urns, food dispensers, waste cans, drums and large mixing kettles and containers can be cleaned



and sanitized with the new AerVoid Sterilizer-Washer. It washes, rinses, sterilizes, deodorizes, preheats and precools, operating quickly and easily by foot pedal action. The device employs a pressure propelled ball bearing, cyclonic-whirling, spray nozzle that cleans with a scouring action. Installation is adaptable to all plumbing conditions. **Vacuum Can Co., 19 S. Hoyne Ave., Chicago 12.**

For more details circle #277 on mailing card.



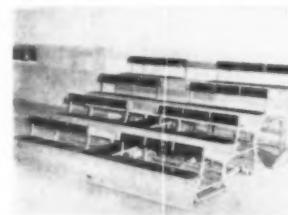
Fume-Hood Portable Science Table Has All-Around Visibility

All-around visibility with safety is a feature of the new portable science demonstration table for schools and colleges. Smoke, heat and fumes are safely confined and exhausted by the completely transparent fume hood enclosure which permits observation of experiments from any place in the room. The unit is completely self-contained, carrying its own sink, water, gas, electrical outlets and fume exhaust system, and can be easily moved from room to room for demonstrations in laboratories, lecture halls or classrooms. **Laboratory Furniture Co., Inc., Old Country Rd., Mineola, L.I., N.Y.**

For more details circle #278 on mailing card.

Foam Rubber Seats and Backs for Ez-A-Way Deluxe Bleachers

Spectator comfort for all or part of gymnasium seating is now available in the new Deluxe Ez-A-Way Folding Bleachers. Foam rubber padding covered with a dur-



able cloth backed vinyl, available in a variety of colors, is used on the seat and backrest boards of the new units. The basic principles of the standard Ez-A-Way bleachers are incorporated into the Deluxe units which are adaptable to the Berlin Chapman Omega Drive for pushbutton electrical operation, and to mobile units. If seat or backrest becomes damaged, it is easily and economically replaced by a new pad for the worn area. **Berlin Chapman Co., Berlin, Wis.**

For more details circle #279 on mailing card.

Maintenance Is Simplified With "Modern-cote" Wall Coverings

The "Modern-cote" line consists of three new wall coverings for use in institutional interiors where durability, flexibility and easy maintenance are of prime importance. "Modern-cote 33," a durable, vinyl-coated fabric, incorporates an extra layer of vinyl to assure color permanence and easy cleaning. "Modern-cote 44," a 20-gauge vinyl sheeting, is available in standard as well as special color combinations which are fused to the underside of the fabric. "Modern-cote 55" is a line of flexible wood veneers laminated to a fabric backing sheet. It may be applied to irregular and even curved surfaces, and is available in 12 different woods. **New Castle Products, Inc., Wall Covering Div., New Castle, Ind.**

For more details circle #280 on mailing card.

Modular Table and Planter for Viscount Furniture Series

The modern Viscount Series of furniture for student unions, lounges and similar areas now includes a 24-inch square modular table and planter, either unit adapting to outside corner installations. Wall-saver legs are now used in the series which includes ottomans, chairs, planters and tables. Also available are new optional center and



end arms for in-row chair installations. **Royal Metal Mfg. Co., One Park Ave., New York 16.**

For more details circle #281 on mailing card.

(Continued on page 72)

Hillyard Super HIL-TONE® FLOOR DRESSING

SAFEGUARDS against FIRE HAZARDS

Safe on the Floor—Safe in the Mop—Safe in Storage

1 No possibility of spontaneous combustion—

SUPER HIL-TONE is chemically "non-oxidizable"—that is, it can't absorb oxygen when exposed to air, the common cause of heating and spontaneous combustion with widely used, dangerous oily floor dressings.

2 It's fire-retardant—

In official tests, using the "TAG" Closed-Cup Tester, SUPER HIL-TONE failed to show flash point at temperatures up to 175° F. In fact, SUPER HIL-TONE discourages fire. Ask the Hillyard Maintainer to demonstrate this important property.

3 "Classified as to

Floor oils leave a 100% residue that penetrates to create a dangerous fire hazard. Super Hil-Tone is non-oily. — After sweeping only a 20% protective residue is left to condition and protect the surface—keeps finishes from drying out and becoming brittle. A Super Hil-Tone wear resistant film strengthens the finish and enhances it with a deep, lustrous sheen.



fire hazard"

By unique AD-SORPTIVE action, holds dust on the floor surface for fast, efficient removal. Reduces the count of dust particles kicked up by passing feet. Sweeping goes fast and easy; frequent scrubbing is not necessary. It's the answer to your problem of cutting labor time in sweeping, without sacrifice of sanitation, appearance, or safety.



Ask the Hillyard "Maintainer®" for expert advice on more effective floor maintenance. He's a trained floor care specialist, "On Your Staff, Not Your Payroll."



Branches and Warehouse Stocks in Principal Cities

ST. JOSEPH, MO.
U.S.A.
Passaic, N. J.
San Jose, Calif.



MAIL COUPON NOW!

HILLYARD St. Joseph, Mo. Dept. E-3

- Please send me free literature on Hillyard "Fire-safe" SUPER HIL-TONE sweeping.
- Please have the Hillyard MAINTAINER demonstrate SUPER HIL-TONE sweeping on my floors. No charge or obligation.

Name _____

Institution _____

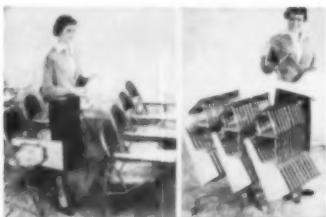
Address _____

City _____

State _____

Detachable Tablet Arm for Folding Chairs

The Table-mate is a new detachable tablet arm unit for use with folding chairs. All



American Seating folding chairs, including spring seat upholstered models, can be quickly converted for writing or study with the handy unit. It attaches in seconds without the use of clamps or other fastening devices, is light in weight, extremely durable, and is available in colors to match the new line of American folding chairs. **American Seating Co., Grand Rapids 2, Mich.**

For more details circle #282 on mailing card.

Diesel Electric Generating Plant Provides 25,000-Watt Power

The new 25,000-watt DZC Diesel Electric Generating Plant introduced by Onan is a completely self-contained unit with a water-cooled Hercules diesel engine. The new engine-generator set will provide smooth-running, full-rated 25KW for both primary and emergency standby applications. **D. W. Onan & Sons, Inc., 2515 University Ave., S.E., Minneapolis 14, Minn.**

For more details circle #283 on mailing card.

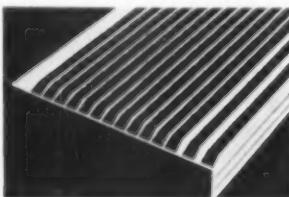
Hot Food Kitchen in Streamlined Design

Space is saved and service speeded with the new and streamlined model of the Heinz Hot Food Kitchen recently introduced. Designed for use in lunch rooms and for single service preparation, the electric kitchen prepares soups in two minutes and hot plate lunches in three minutes. It occupies only 12 $\frac{1}{2}$ by 18 inches of space and has electrically timed outlets for two hot cups for hot food preparation, with a swing-away can opener. **H. J. Heinz Co., Pittsburgh 30, Pa.**

For more details circle #284 on mailing card.

Flat Abrasive Surface On Aluminum Safety Treads

"Traffic Flow" aluminum safety treads have a flat abrasive surface with a heavy-duty aluminum base to give a sure-grip quality on heavy-traffic stairs. The treads are nine inches deep with beveled backs and fit all steps up to 13 inches deep. A



1 1/8 inch nose of aluminum extends over the edge of the step to protect the face, and the treads are easily fastened down. **Wooster Products, Inc., Wooster, Ohio.**

For more details circle #285 on mailing card.

Institutional Cleanser Has Chlorine Bleach

Ajax Cleanser with Instant Chlorine Bleach is now available for institutional use. The new cleaning product is designed to remove stains quickly and the smooth texture makes it rinse away with no gritty residue. The "built-in" chlorine bleach eliminates the need for an extra bleaching product and disinfects as it cleans. **Colgate-Palmolive Co., Associated Products Dept., 300 Park Ave., New York 22.**

For more details circle #286 on mailing card.

Detergent in Special Package for Coin-Operated Laundries

A coin-vended size of Tide is now available for use with coin-operated washing



machine installations. The new pack is called the Tide 120's Coin-Vended Size and is packaged 120 cartons to the case, to be dispensed at ten cents per carton. Special vending machines for this size package of Tide are made by the Vend-Rite Manufacturing Company, Chicago, for installation near coin-operated automatic washing equipment in dormitories, residence halls and other areas. **The Procter & Gamble Distributing Co., Bulk Soap Sales Dept., P.O. Box 599, Cincinnati 1, Ohio.**

For more details circle #287 on mailing card.

Zip-Top Paper Towel Carton Opens by Pull Tab

A convenient tab at one end of the Zip-Top tape which pulls out across the top makes it easy to open Nibroc paper towel



cartons. The carton need not be cut and can be re-used for storage or shipping. Maximum sanitation of contents is assured by the new package. **Brown Company, Box 131-Z, Boston 14, Mass.**

For more details circle #288 on mailing card.

Gas-Fired Unit Ventilator for Low Cost Classroom Heating

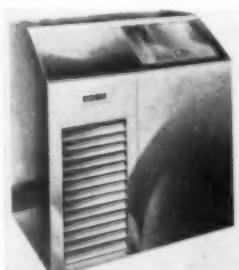
Heating, ventilation and air filtering are combined in the new Academy line of gas-fired Unit Ventilators. Designed in collaboration with architects and school officials, the new line is a complete classroom package. It provides an independent system of controlled heating and ventilation, without a central heating system. An electrically controlled motorized slide-out damper section automatically mixes outside fresh air and recirculated room air for proper ventilation. **Williams Furnace Co., P.O. Box 577, Buena Park, Calif.**

For more details circle #289 on mailing card.

Medium-Gauge Permon for Full Wall Protection

Attractive designs and embossing give the new Medium-Gauge Permon vinyl fabric-supported wall covering a highly decorative quality while protecting walls in dormitories, reception rooms, and other areas. Medium-Gauge Permon provides protective strength to any walls that do not get heavy abuse, and is particularly recommended by the manufacturer for floor-to-ceiling vinyl wall covering. **Frederic Blank & Co., Inc., 295 Fifth Ave., New York 16.**

For more details circle #290 on mailing card.



Maintenance Free Icemaker Manufactured By Koch

No moving parts in the ice making zone, no gear boxes, scrapers or crushers, nothing that can wear out or require maintenance, and a self-cleaning ice making zone are features of the new Koch 900 Icemaker, which has been field tested for more than 18 months under rigorous conditions. The ice nuggets are free flowing, do not stick together and are easily scooped up. The ice bin is stainless steel lined, includes a bin level control and the working side of the cabinet is available in silver-luster baked enamel or No. 4 finish stainless steel. **Koch Refrigerators, 401 Funston Rd., Kansas City 15, Mo.**

For more details circle #288 on mailing card.

Portable Public Address System Is Powerful But Inexpensive

The single unit amplifier and speaker combination available in the new Raven portable public address system, covers areas up to 3000 square feet and audiences up to 300 persons. The system includes an eight-inch high-fidelity speaker, powerful three-watt amplifier, a crystal microphone



and volume control. The tone controls are preset and the unit has a phonograph input to play records or recorded speeches. **Raven Electronics Mfg. Co., 2130 W. Carroll Ave., Chicago 12.**

For more details circle #292 on mailing card.

Transit Coaches for Group Transportation

The Oneida Suburban is a new line of transit passenger coaches for college and other uses where group transportation is



required. Designed for economy in cost and operation, with safety and dependability, the Suburban features sliding-type aluminum sash, comfortable interior with 76-inch headroom, dual headlights, wrap-around "Giant" windshield, roomy luggage compartments and attractive appearance. Each unit will be custom built to meet the particular needs of any college. **Oneida Products, Div. of Henney Motor Co., Canastota, N.Y.**

For more details circle #293 on mailing card.

Coffee Dispensing Machine Brews Fresh Cup Automatically

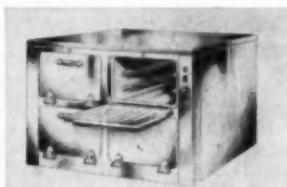
A new vending machine that brews each individual cup of coffee from ground coffee beans, filters the brew and serves it fresh



with cream and sugar or black, is available in the "Brew-A-Cup." Research and development work on the machine and the coffee used has been under way for five years. A measured amount of carefully selected ground coffee is packed between two layers of filter material. As the machine is operated, a new pack, sufficient for one cup, comes into place to be brewed in six seconds by the automatic mechanism. **Rudd-Melikian, Inc., Hatboro, Pa.**

For more details circle #294 on mailing card.

Electric Food Warmer Has Adjustable Steel Slides



Two pair of removable and adjustable stainless steel slides in the new Thermotainer Type C-4 Electric Food Warmer adapt it to all standard sizes of pans, baskets, trays and insets. The flush-mounted,

shelf-type doors simplify loading and unloading and provide for pass-through construction. All compartments are controlled by a single, full-range thermostat and have individual moisture control. The thermotainer "channeled heat" principle assures uniformity of temperatures, operating costs are low, and construction is of stainless steel. **Franklin Products Corp., 400 W. Madison St., Chicago 32.**

For more details circle #295 on mailing card.

Sliding Shelf Shelving Is Instantly Adjustable

Sliding Shelf Shelving in eight standard sections with extra parts available to meet every requirement, are now available from Lyon Metal Products. Instantly adjustable

without tools, the shelves can be used for record storage, books, supplies and other needs. Shelving sections are 84 inches high, 37½ inches wide and 12 5/16 inches deep. Shelves are adjustable on 1½ inch



centers, slip easily into slots in uprights and lock in place. **Lyon Metal Products, Inc., 2 Clark St., Aurora, Ill.**

For more details circle #296 on mailing card.

(Continued on page 74)

Training...

Technique...

Time...

The combination necessary for fund-raising success

When you select the American City Bureau to direct your program, you gain a full measure of this combination through a thoroughly trained permanent staff; well schooled in advanced "Bureau-proved" techniques.

With over 46 years of fund-raising experience, the Bureau has developed and refined methods to solve most fund-raising problems. Today's Bureau pluses are yours—gained in serving more than 150 satisfied educational clients.

Start on the solution of your fund-raising problem by writing for an exploratory conference and estimate of potential.

American City Bureau

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COAT and HAT RACKS

Style D F. 4-40. Portable Checker Rack (illustrated) is 4 ft. 2 in. long, holds 40 coats and hats, wherever needed, on wheels, swiveling on swivel casters. Coats may be hung without checks and snap-on numbers. Strongly welded of square tubular, heavy gauge and highly embossed furniture steel. Smart in modern baked finishes. Give lifetime service — never sag, creak or sway. 3 ft., 4 & 5 ft. units available, as well as other efficient space saving equipment for every church, school, commercial, industrial and institutional need.

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VOGEL-PETERSON CO.

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Portable Odor Control Unit Keeps Air Clean and Pleasant

Tobacco smoke, occupancy, food and paint odors are destroyed by the new Airkem Cavalier unit designed for portable use. Weighing less than eleven pounds



complete with a full charge of Solidaire, the odor counteractant, the Cavalier aids in combating stale and stuffy air in fully closed and heated areas up to 1000 square feet. The two-tone gray steel cabinet with chrome trim contains a silent, two-speed circulating fan, adjustable odor-control rates and a feeding mechanism for the Solidaire. Airkem, Inc., 241 E. 44th St., New York 17.

For more details circle #297 on mailing card.

"Fabrique" Wall Covering Is Durable and Decorative

The durability and protection of vinyl and the decorative quality of fine wall paper are combined in "Fabrique," an economical, easily-maintained wall covering. "Fabrique" is scuffproof and virtually stain-proof. Even lipstick, ball point ink or grease may be removed by wiping or lightly washing. It is a vinyl-impregnated non-woven fabric which is easily butted and will not shrink away from seams, baseboards or wainscoatings. The Birge Co., Inc., 390 Niagara St., Buffalo 5, N.Y.

For more details circle #298 on mailing card.

Multi-Purpose Art Desk Has Split Working Top

A split top working surface provides convenience in use of the new Top-O-Matic Art Desk. When the top is flat, the



desk serves for commercial and other classes. For art classes the left section of the split top can be adjusted to any desired working angle while the right section remains flat for working materials. Round corners and tapered legs of steel tubing welded in a one-piece rigid frame give stability with attractive appearance. The Fibresin top is adjusted by a touch of the Top-O-Matic button. Smith System Mfg. Co., 212 Ontario St. S.E., Minneapolis 14, Minn.

For more details circle #299 on mailing card.

(Continued on page 76)

DISTINCTIVE **BRONZE PLAQUES** FOR EVERY UNIVERSITY NEED



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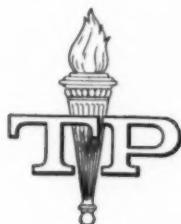
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PLASTIC FINISH

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No damp mopping
No buffing... EVER
Apply... dry sweep
daily... that's all

Just familiar simple steps

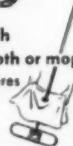
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Get all wax off.
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2. Mop application—
2 thin coats of NOFALS
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IT'S A BREEZE TO STRIP WITH CINDET

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Manufacturers of:
PUBLIC SEATING • OUTDOOR and JUVENILE FURNITURE • BRIDGE SETS

Integral Hinge Brackets Strengthen Toilet Compartments

The strength of the new Sanymetal Integral Hinge Brackets for toilet compartments is demonstrated in the accompanying illustration. Bracket and hinge are also durable in use, assuring minimum maintenance with maximum resistance to abuse.



The new brackets are installed at the factory on toilet compartment pilasters and permit quicker installation of doors with improved appearance. They have no external bolts which show, do not interrupt the flat surface of the pilasters, and are finished to match. **Sanymetal Products Co., Inc., 1705 Urbana Rd., Cleveland 12, Ohio.**

For more details circle #300 on mailing card.

Safety Step Tread Prevents Slipping

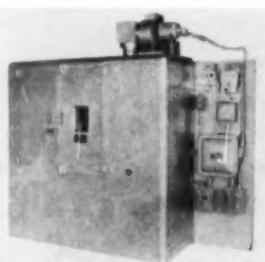
The Rub-Bub Safety Step Plate used on school bus steps for safety and durability, is now made available for use on steps and other areas to protect against slipping

and falls. Metal backed for rugged service, the tread is non-skid wet or dry, and the small squeegee ribs grip shoe soles while water drains off through the deep grooves. **Samuel Moore & Co., Mantua, Ohio.**

For more details circle #301 on mailing card.

Saf-T-Bilt Lab Oven Has Accurate Temperature Control

Improved shape and sizes, with more efficient direction of air flow in the work chamber and accurate temperature control, are features of the new Despatch Saf-T-Bilt laboratory ovens. New safety controls are also built into the ovens which are electrically heated and can be adapted to use steam or hot water at available pressures. Two swinging doors provide a wide oven aperture for easy and fast loading and an observation glass window is inserted in one

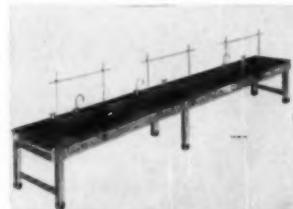


door. The new oven is available in sizes to fit any laboratory need. **Despatch Oven Co., 611 S. E. 8th St., Minneapolis 14, Minn.**

For more details circle #302 on mailing card.

Science Lab Equipment Table Accommodates Six Students

An overall length of 13 feet provides enough working space for six students at the new Tolerton Science Lab Equipment Table. All students face in the same direction for ease in teaching and supervision. The lead-lined trough requires only one outlet and the unit includes three mixing faucets, three double gascocks, three du-



plex electric outlets and six student drawers. Tops may be black acid-resistant laminated Northern hard maple or Tols-tone. **The Tolerton Company, Alliance, Ohio.**

For more details circle #303 on mailing card.

"Mojave" Vinyl Wall Covering is Flame Retardant

A flat, non-reflective finish that looks like suede characterizes the new "Mojave" fabric-backed vinyl wall covering added to the Koroseal line. Available in 39 colors, including several solid accents as well as neutrals and pastels, "Mojave" meets most flame retarding requirements. **B. F. Goodrich Co., Akron, Ohio.**

For more details circle #304 on mailing card.

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arm chair.)

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Workingside view

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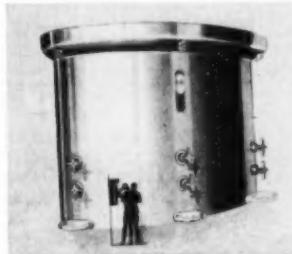
O-Cedar Germicidal Floor Cleaner Cleans and Sanitizes

A specially formulated floor cleaner, which is non-toxic and completely safe for almost any surface, cleans, disinfects, deodorizes and sanitizes in one operation. Known as O-Cedar Germicidal Floor Cleaner, it is economical in use and comes in one, five, 30 and 55-gallon containers. O-Cedar Div. of American-Marietta Co., 2246 W. 49th St., Chicago 9.

For more details circle #305 on mailing card.

Column Type Showers for Multi-Person Use

The Wall-Mounted type Multi-Person Shower is now available in the Bradley Washfountain line. The showers are provided with three or two adjustable shower heads, soap trays and control valves, en-

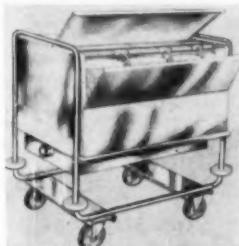


abling one set of piping connections to serve two or three shower facilities with each bather having individual control of water volume and temperature. The new

Wall Shower is self-contained, assembled for mounting on walls at any desired heights, and is particularly suitable for narrow rooms. Bradley Washfountain Co., 2203 W. Michigan Ave., Milwaukee 1, Wis.

For more details circle #306 on mailing card.

Electrically Heated Dispenser for Dishes and Plate Covers



Dishes and plate covers are completely enclosed during transport to place of service in the new Frick electrically heated Model H2 Dispensator. The stainless steel cabinet has a hinged cover with a door on each side for speedy dispensing and the entire side panel slides up for cleaning. Shelves are slanted to hold dishes firmly against the slanting back panels and adjustable, self-locking, tubular dish stack supports add to the safety. The electric heating element is removable and the Dispensator moves easily on ball bearing, rubber-tired wheels. W. H. Frick Co., 603 Citizens Bldg., Cleveland 14, Ohio.

For more details circle #307 on mailing card.

Literature and Services

- Control systems for hot water, steam, gas-fired and electric unit ventilators are described in the "Unit Ventilator Control Application Manual" available from Barber-Colman Co., 1300 Rock St., Rockford, Ill. Actual control applications are shown and complete cycles of operation, damper sequence charts, temperature control specifications and installation data on all models in the line are included.

For more details circle #308 on mailing card.

- Maintenance and refinishing methods for most types of laboratory work surfaces are described, with prices, in the new six-page "Maintenance Guide" available from Keweenaw Mfg. Co., 5023 S. Center St., Adrian, Mich. Also described and priced are commonly used lab service fixtures.

For more details circle #309 on mailing card.

- A new short-run printing technic makes it possible for professors to have texts tailored to their own syllabus and books printed at low cost for limited distribution. Available from G. H. Hall & Co., Dept. D, 97 Oliver St., Boston 10, Mass., the service permits reproduction in a single folioed volume, seven by ten or five by seven inches in size, of pages from existing publications, typewritten or mimeographed pages, line drawings and the like. Single library copies of rare or worn books can also be reproduced in quantities for use in classes and to relieve the strain on "reserved shelves" in libraries.

For more details circle #310 on mailing card.

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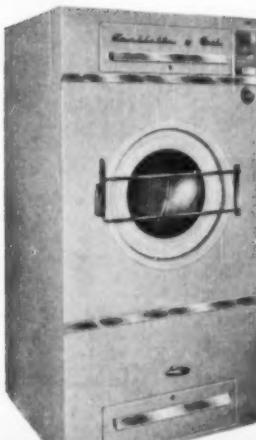
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- Tumblette turns out more work faster—put linens back in service quickly, reduce linen inventory.
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• Business managers, planning committees, architects and others concerned in the planning of new college dormitory or residence hall facilities will find much of value in a new manual entitled "Dormitory Furniture Planning." Offered by Sligh Lowry Contract Furniture Co., Holland, Mich., the book has pages of blue prints showing dormitory and residence hall layouts, and of furniture which is designed to be built-in and therefore to qualify in construction grants. Included in the manual are attractive drawings of suggested installations, with perspectives, specifications for dormitory room furniture, and actual photographs of the furniture.

For more details circle #311 on mailing card.

• Ross Instantaneous Heaters, with exclusive, extra-large steam inlet area, are described in Bulletin 304.4K1. The illustrated bulletin, available from American-Standard, Industrial Div., Detroit 32, Mich., contains tables, charts and piping diagrams which aid in selecting the proper unit for various requirements, and describes the principal features of the heaters.

For more details circle #312 on mailing card.

• "Test Instruments, High Fidelity and Ham' Equipment" are shown and described in a new catalog available from Electronic Instrument Co., Inc., 33-00 Northern Blvd., Long Island City 1, N.Y. Each kit, which comes with instruction book for use in vocational and electronics classes in schools and colleges, is reviewed in detail, and prices are given for the kits as well as for the factory-wired instruments.

For more details circle #313 on mailing card.

• The revised edition of the "Pocket Manual of Heating" is available from Dunham-Bush, Inc., 179 South St., West Hartford 10, Conn. at \$1 per copy. Sections on wet heating systems, radiation, unit heaters, pumps, blower unit heaters, special purpose pumps and control equipment are among the many features of the handbook.

For more details circle #314 on mailing card.

• An informative booklet on "The Microphone in Public Address Systems" is available from Shure Brothers, Inc., 222 Hartrey Ave., Evanston, Ill. The 8-page brochure describes the components of a public address system, gives tips on buying or improving a system, and carries an instructive section on "Mastering the Microphone."

For more details circle #315 on mailing card.

Suppliers' News

Califone Corporation, 1020 N. LaBrea Ave., Hollywood 38, Calif., manufacturer of record players, sound systems, language laboratories and related teaching equipment, announces the acquisition of a majority interest in its operation by Rheem Mfg. Co., 400 Park Ave., New York 22. As of December 1 the company became known as **Rheem Califone Corporation** and will be operated as a Rheem subsidiary to develop, manufacture and sell Rheem's recently announced line of teaching machines for schools and industry, in addition to the Califone line.

Gilbert-Jaffe Co., Inc., 34 E. 29th St., New York 16 is a new contract organization

formed to supply furniture and furnishings for colleges and other institutions. The new company will sell to the contract dealer, representing a number of firms nationally, and making available complete room furniture with accessories from one source.

Photostat Corporation, 1001 Jefferson Rd., Rochester 3, N.Y., manufacturer of microfilming, photocopying and offset duplicating equipment and supplies, announces the acquisition of the **Flofilm Division of Diebold, Incorporated**, manufacturer of microfilm cameras, readers, processors and related supplies and equipment. The transaction gives Photostat a complete microfilming product line and it is stated that Photostat and Flofilm production will be integrated in the new modern Photostat plant, and Flofilm service stations and film processing installations situated in cities where Photostat maintains branch offices will be relocated in Photostat facilities.

Thompson Ramo Wooldridge Inc. announce acquisition of a controlling interest in **Magnetic Recording Industries, 11 E. 16th St., New York 3**, producer of language laboratory and other electronic educational equipment. **Magnetic Recording Industries**, according to the announcement, will continue to operate autonomously as a subsidiary of **Thompson Ramo Wooldridge Inc.**, which includes Dage Television, producer of closed circuit television, **Bell Sound**, manufacturing tape recorders and stereophonic music components and consoles, and **Bel Canto**, producer of stereophonic tapes.

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INDEX TO ADVERTISEMENTS

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The index on this and the following page lists advertisements in this magazine alphabetically by manufacturer. For additional information about any product or service advertised, circle the manufacturer's key number on the detachable postcard and mail it. No postage is required.

Products described in the "What's New" pages of this magazine also have key numbers which appear in each instance following the description of the item. For more information about these items, circle the appropriate numbers on the postcard and mail it, without postage, to College & University Business.

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